

Military Affairs

VOLUME 1
FALL 1966

I



IMAGINEER AURAND

MESSAGE TO THE MEMBERSHIP

The problems discussed in this place in the last issue of *Military Affairs* have not yet been fully resolved. The officers of the American Military Institute have continued to study its postwar situation and the best means of continuing and improving its services to the members. They have sought the opinions of numerous members and their advice, finding general support for their belief that the Institute is more than ever needed in this most difficult political and military phase of the world's history.

Here in the latter months of 1946 there are some three million Americans with a definite military and naval status. The forces on active duty number approximately one and one-half millions. The Reserve forces, officer and enlisted, total far more than one million. The National Guard reorganization is now under way with a good beginning towards its expected eventual strength of three-quarters of a million. The Reserve Officers Training Corps, in several hundred schools, colleges, and universities is reaching an expected enrollment of more than two hundred thousand.

Highly important to the national security, though smaller in numbers, are the thousands of civilians of standing, whose wartime service was under the War or Navy Departments and in other national agencies established for the purposes of war. Most of these able men have now returned to their civilian pursuits—in the professions, in business and industry—though many have continued status as consultants of the Government.

The United States is perforce a military nation today, and there are no clear indications whatever that it will not continue to be a military nation for an unforeseeable period into the future.

The problems of national security are immense and the numbers are great of those who have direct interest in those vital problems—civilians and military men of every service of air, sea and ground.

The American Military Institute is established and conducted for all persons of the nation who think sincerely and deeply in terms of the national security—in terms, even it may be, of the national survival. It offers to them a broad field and medium of discussion, the need for which seems unarguable at this stage of world affairs.

COLONEL JOSEPH I. GREENE
Vice-President

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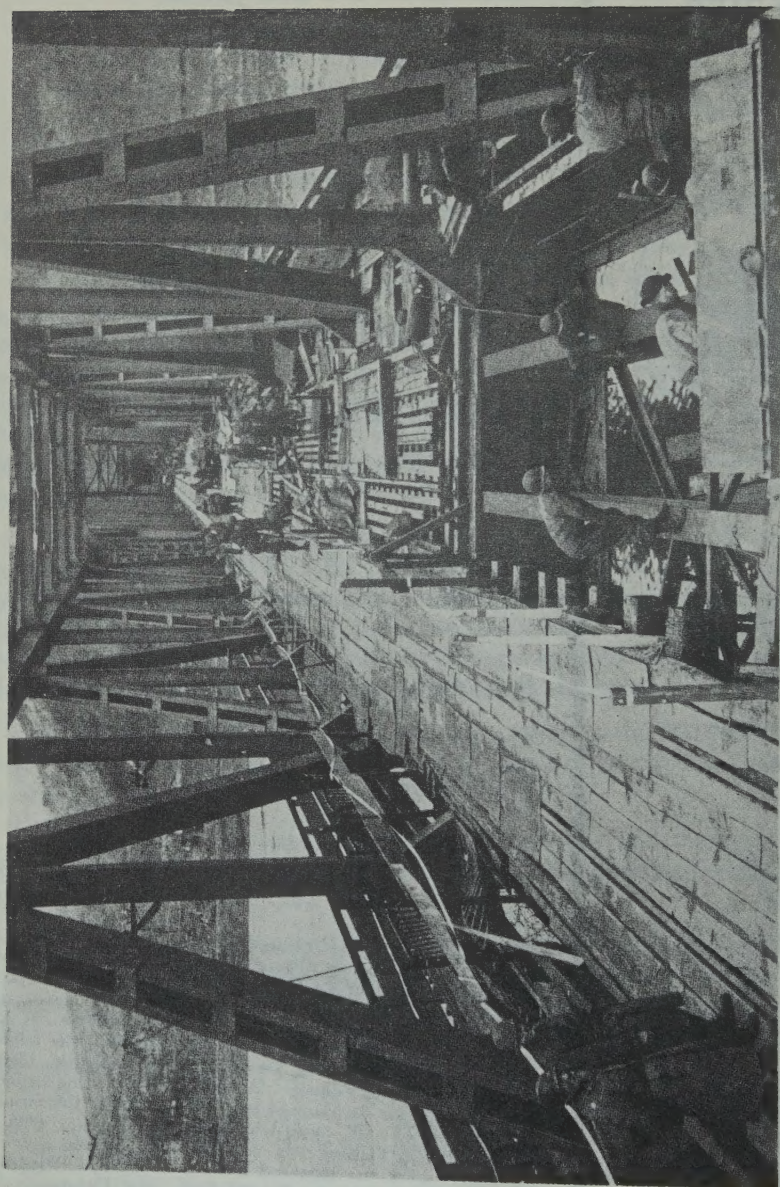
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COVER: Major General Henry S. Aurand, holder of twelve decorations, was named Commanding General of the Sixth Service Command, Headquarters Chicago, Illinois, in September 1942. He went overseas in October 1944 for duty as Deputy Chief of Ordnance, Communications Zone, European Theater of Operations, and in December 1944 was made Commanding General of the Normandy Base Section. The following May he was named Commanding General, Service of Supply, United States Army in the China Theater. In January 1946, having returned to the United States, he was assigned to the Sixth Service Command as Commanding General. He again went overseas in February 1946, this time as Commanding General, Africa-Middle East Theater, and in June of the same year he was appointed Director of the new Research and Development Division of the General Staff, War Department, Washington, D. C. Although not a member of the American Society of Civil Engineers, General Aurand modestly states, "Along with several thousand others I have received the degree of Bachelor of Science by Act of Congress: and as a consequence, consider myself an engineer."



American engineers laying rails on the Ludendorff Bridge over the Rhine at Remagen, Germany. This bridge, captured on March 7, 1945, served the American troops for ten days. Four hours after this picture was taken, on March 17, the bridge collapsed with 400 United States troops.

THE ENGINEER AND THE CHANGING SOCIAL ORDER

The Need for Engineering in Postwar National Defense

BY MAJOR GENERAL HENRY S. AURAND*

In the two World Wars the engineer has applied himself, both on and off the battlefield, to a degree never before recorded in the history of warfare. The change that occurred in these wars was perhaps greater off the battlefield than on, although I am sure that the Army Chief of Engineers might well take exception to this statement. But I wish to talk for a moment about the engineer off the battlefield because it is in the period after World War II when no battles are being fought that the engineer must readjust his thinking to the conditions with which he is faced.

Prior to World War I, the engineering activities which applied the scientific knowledge of our country to the military art were largely conducted by men in uniform or by civilian employees of the Armed Forces. During World War I, it became necessary to utilize a great proportion of our industrial capacity for the manufacture of munitions. The engineer was called in to make this conversion. As you all know, this conversion took long and very little of the production of our industry ever reached the battlefield. Undoubtedly it was the creation of this industrial capacity for military purposes that greatly influenced our enemies in World War I to sue for an armistice; but none the less, the fact remains that the conversion was too slow and too late.

In the period between World War I and World War II, those in the military service, who had previously engineered the production of military equipment, went to industry and the industrial engineer for the purpose of planning industrial mobilization. Every engineering society became cognizant of the necessity for speedy industrial conversion in the event of war. The lesson of World War I had been learned and was applied in World War II, when, through our engineering skill, we became in truth and in fact the "Arsenal of Democracy."

The important thing to be noted in this history is that there was a change in the viewpoint of the engineer—from his viewpoint prior to World War I, to that after World War I—in connection with the national security. It is also interesting to note that the basic factor in this change of viewpoint was speed, rather than any new concept of the utilization of national resources in the event of war.

World War II brought the scientist and his laboratory into almost complete mobilization in the interest of national security. However, the scientists themselves believe that practically none of the basic research done during World War II was utilized in its conduct or made available on the battlefield. That is, the same thing happened to basic scientific research in World War II as happened to our industrial production in World War I. It arrived too late. Consequently, there are two problems posed to the

*General Aurand delivered this speech before the American Society of Civil Engineers, October 16, 1945, in Kansas City, Mo.



Troops and supplies streaming ashore in Normandy, D plus 4

engineer at the moment. The first of these is to make the military application of the basic scientific information discovered during World War II to our national security; and the second of these is to arrange that, in the event of a future emergency, scientific information can be given military application in a very much shorter time.

Since these are the two ideas which I would like to leave with you, I would like to restate

them in another form. Our country requires the immediate service of all types of engineers to apply a large body of scientific information to the needs of our common defense. The country also needs a mobilization plan for scientists and engineers, as effective as was our industrial mobilization planning for World War II, in order that new scientific information may reach the battlefield in the form of new equipment in the shortest pos-



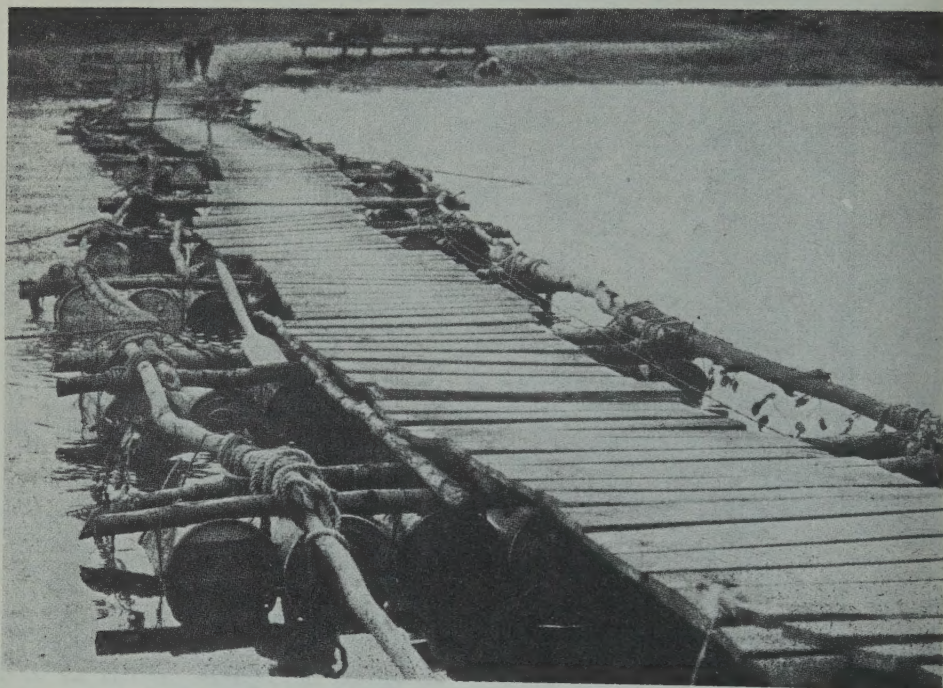
Completed approach to old civilian jetty, Green Beach Parang, P. I.

sible time.

There is also a negative, or defensive idea, which must be kept in mind. The implements of modern warfare are not only fast, but they are extremely, and sometimes subtly, destructive. Up to the present time, short of going underground in air-conditioned establishments, dispersion over great areas may be the only way to prevent a knock-out blow being given to our nation at the outset of a future war. Perhaps these negative concepts are more important in the engineer's day-by-day thinking than are the positive ones which I have already stated. In order to illustrate what the engineer may be called upon to think when engaged in his tasks in the near future, permit me to call upon your imaginations for the solution of a hypothetical problem. It has to do with the steel industry. It could be applied to any other. The steel industry already is well established in the Pittsburgh, Chicago, and Birmingham,

as well as other areas. It has not as yet reached its full growth. In planning the growth of the steel industry, or the adaptation of new scientific discoveries to it, the engineer should consider the national necessity of having these three areas not only completely independent, but also so arranged that they can each produce all of the products that any can produce. This is an illustration of the negative or defensive concept which the engineer might apply under our present conditions. Such considerations are as important locally as they are on a national scale. They apply perhaps with greater emphasis to means of transportation and communication than they do to single integrated industries of our productive capacity. Alternate routes, alternate kinds of transportation, and alternate kinds of communication are a national necessity.

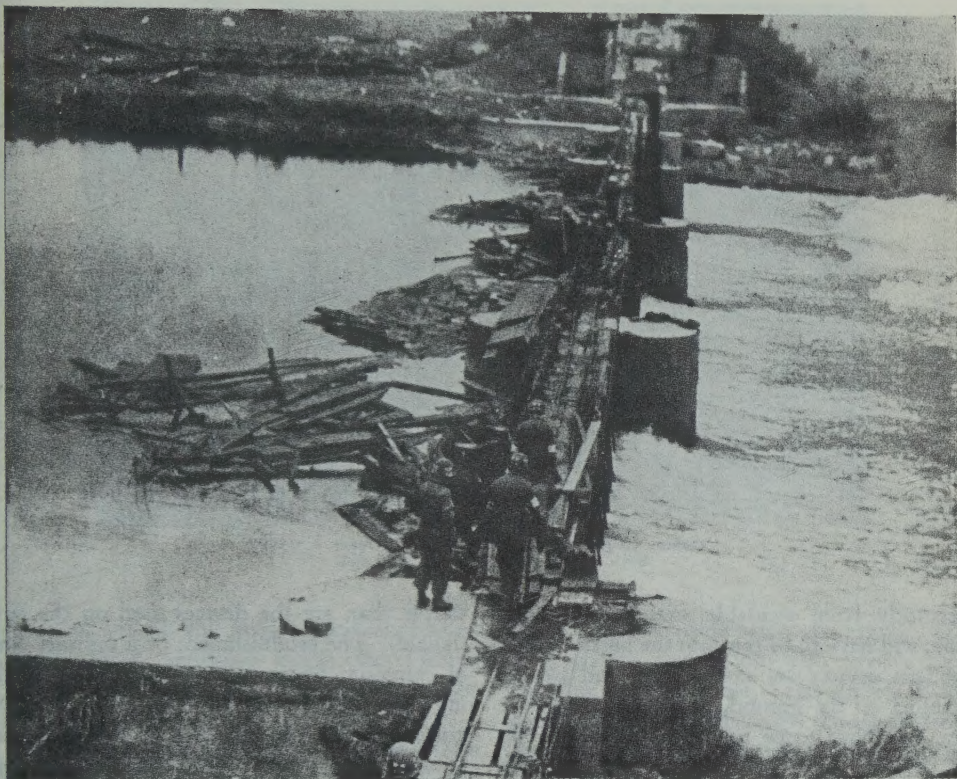
On the positive side, there is no need for hypothetical illustrations of what the engi-



Footbridge, with empty gasoline drums for floats, constructed by American engineers across the Marne River near Metz, France, 1918

neer may do in the next few years. The need of the Armed Forces for the application of existing scientific knowledge to military equipment is at the moment tremendous. The work is so great that it can no longer be done by engineering personnel of the Armed Forces, whether in uniform or in civilian clothes; nor perhaps can the national budget bear the burden of these applications. The Armed Forces are asking for outstanding engineers to serve on advisory panels and committees on a basis which will permit of reasonable payment for the time they will devote to the Government. They are inviting engineering societies to undertake the solution of national defense problems. They are making contracts with engineering firms

for the application of scientific information in the development of military equipment. The demand for trained engineers has perhaps never been greater in the history of our country. It is incumbent upon each engineer to determine for himself, and upon each engineering society to determine for itself, the extent of participation in those engineering problems which have to do with the national security. The Armed Forces realize that now the war is over, they no longer have first call on the engineering resources of the country; but they hope and feel confident that the engineers and their societies will also realize that they in turn can not forget or lay aside the engineering problems now confronting the Armed Forces.

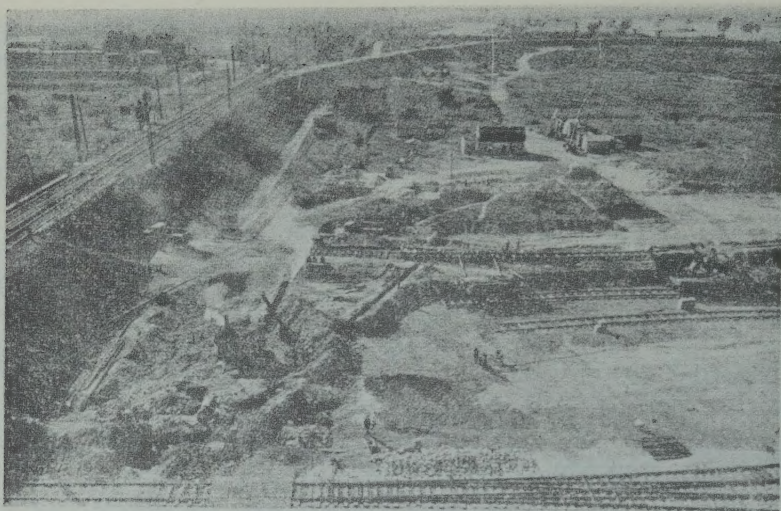


Temporary footbridge constructed by American engineers across piers of demolished bridge over the Moselle River, France

There is another suggestion in this regard which already has taken form; namely, the integration of the national security committees of the various scientific and engineering societies. The old established boundaries of the various scientific and engineering fields have been so over-lapped that in many cases hyphenated titles are now required. The physical-chemist—the bio-chemist—the mathematical-physicist—and a thousand and one other combined names for new associations of engineering and science are ample evidence of this fact. This combination of various engineering societies, or engineering

and scientific societies, will not only help in the solution of the immediate engineering problems confronting the Armed Forces, but will greatly accelerate the engineering and scientific mobilization which will be required in the future.

There is another new concept also which I would like to leave in the minds of engineers. At the beginning of this talk, I spoke of emphasizing the role of the engineer off the battlefield because that is his position in time of peace. However, when the shooting starts, the engineer in civilian clothes will no longer be a stay-at-home. New devices, if created



Railway yards, Villeneuve-St.-Georges, October 5, 1945

promptly from available scientific information, will have to be put into the battle. These modern devices are not simple; and troops, whether on the ground, in the air, or on the sea, will have to be taught their application in combat. The scientist and the engineer must be there to do this instruction. The tactical side of the Army is accepting this fact and is obtaining the assistance of the engineers, particularly in the conduct of tests of equipment and in the instruction of troops in the functioning of equipment which has just come from the laboratory.

The more complex the modern devices of the battlefield become, the greater is the requirement for transportation of all types—land, sea and air—rail and long-distance trucking; likewise the stockpiling and handling of materials requires all sorts of handling equipment, which must exist in all kinds of places in every variety of climatic conditions. By and large, these are civilian items of equipment about which there is considerable experience of use in civilian life, but the application to military use is no more

simple than are the devices used on the battlefield. The establishment of a military line of communications is a military task requiring the greatest resourcefulness. The requirement for the engineer in the next war—on the battlefield and along the lines of communication behind it—will be greater than ever before.

On the next higher level—on the level of the strategist—of the Chief of Staff—of those responsible for the overall conduct of military operations—the advice and assistance of the engineers will be required not only in connection with the utilization or employment of new weapons, or the possibility of new military applications of scientific knowledge, but also in the actual planning of the military campaign. I am sure all of you are already familiar with the need for the engineer in the increase of the productive capacity, and conversion of existing production, of the country in time of war. Yet, the need for the engineer will be even greater when war comes again because the time element will be far less. This need for the engineer



The same yards on November 1, 1945.

exists as well in the fields of transportation and material handling within the United States. Speed will be the watchword more than ever before.

So, in the face of changing national and international conditions—in the “changing social order,” as you will—for the next few years the engineer should bear in mind, on the negative side, those factors which will insure the national security in the face of a violent initial surprise attack, which may herald the beginning of World War III. On the positive side, he should contribute a part of his time and his society’s time to the engineering problems facing those charged with national defense, particularly in the field of applying the great bulk of available scientific knowledge to the creation of implements of war. He should also bear in mind that he must remain ready for a prompt and speedy scientific and engineering mobilization. To the securing of both of these ends, he should urge his society to set up a separate

body for the consideration of national security problems and to join with other societies for the same purpose. His efforts should constantly be to decrease the time lag between the availability of scientific information and its useful application. Practice in this in the fields of peace will certainly lessen the time of bringing new implements to the fields of battle. The engineer’s task in national security is no longer a task for the military alone. The survival of our democratic idea, our concept of a Bill of Rights, and our way of life no longer rests upon the military forces you have created, but upon your assistance and insistence in the solution of our military engineering problems. The scientists and the engineers of other nations are making a supreme effort to place the military potential of their respective countries at the top. We must not only not be surpassed, we must stay ahead. Whether we do so or not is largely the responsibility of you civilian engineers.

THE DEVELOPMENT OF THE OFFICE OF THE CHIEF OF NAVAL OPERATIONS

BY HENRY P. BEERS

PART II

The advent of the Democratic administration of Woodrow Wilson in March, 1913, brought into the secretaryship of the Navy a North Carolina newspaper editor, Josephus Daniels. He opposed the Aid System, being averse to the possibility of domination by the military element in the department, and was disposed to let it lapse. He preferred to deal directly with the bureau chiefs.¹ In 1913 the Aid for Personnel and in 1914 the Aid for Inspections were detached and not replaced. Only the admonitions of Admiral George Dewey, President of the General Board, restrained the Secretary from ousting Rear Admiral Bradley A. Fiske, the Aid for Operations.²

The failure of Congress to legalize the Aid System and its practical abolition by Secretary Daniels provoked naval officers into a renewal of their efforts to secure the establishment of a general staff. This movement became centered in the office of the Aid for Operations. As head of the war plans section of the General Board during 1910-1911, Fiske had become cognizant of the fact that the existing plans were meager

and unsatisfactory.³ As Aid for Operations, he became chiefly responsible for the readiness of the fleet for war. He believed that the department organization was weak in this respect and that what it needed was a general staff. Throughout 1913 and 1914, particularly after the outbreak of the European War, he urged upon the Secretary that measures be taken to effect an organization that would enable the department to prepare for war.⁴ Fiske urged that the Secretary, the Assistant Secretary, and the four aides hold daily councils in which matters would be discussed and instructions be given to the aides for issuance orally or in written orders signed "By direction of the Secretary." The General Board likewise recommended that the Navy be placed upon a war footing.

In October, 1914, Fiske organized an informal "war staff" in his own office to discuss war plans and the organization of a general staff.⁵ Early in the following month he put into writing the recommendations he had made to the Secretary.⁶ He

¹ Josephus Daniels, *The Wilson Era. Years of Peace, 1910-1917* (Chapel Hill, 1944), p. 239.

² Fiske, one of the outstanding naval officers of his time, was a native of Lyons, N. Y., where he was born of New England forbears in 1854. After graduating from the Naval Academy in 1874, he rose in rank through the years becoming a commander in 1903, the year in which he attended a short course at the Naval War College. He was an inventor and electrical and mechanical expert as well as a naval strategist.

³ Bradley A. Fiske, *From Midshipman to Rear Admiral* (New York, 1919), p. 479.

⁴ See his letter to the Secretary of Aug. 26, 1913, and accompanying memorandum from the Naval War College, in Senate Committee on Naval Affairs, *Naval Investigation Hearings . . . Sixty-Sixth Congress, Second Session* (Washington, 1921), pp. 694-9.

⁵ Fiske, p. 552.

⁶ Printed in *ibid.*, pp. 558-9; in Senate Committee on Naval Affairs, *Naval Investigation Hearings*, pp. 732-4, 3042-4; and partly in Tracy B. Kittredge, *Naval Lessons of the Great War* (New York, 1921), pp. 222-5.



Secretary of the Navy Josephus Daniels and officials of the Navy Department

stated his belief that there was danger of the United States being drawn into the war, and he emphasized the importance of creating a general staff in order to prepare the Navy adequately.

Finally, after the appearance of the annual report of the department, Fiske realized that the Secretary would take no action, and he opened negotiations with Congressman Richmond P. Hobson, hero of the Spanish War. At Fiske's suggestion Hobson had him called before the House Naval Affairs Committee on December 17, 1914, when he refuted the complacent statements of the Secretary's report and advocated the formation of a general staff and the ex-

pansion of the personnel of the Navy. Secretly Fiske met Hobson at the latter's home on December 27, 1914, and January 3, 1915, explaining to him the necessity of forming a general staff in order to have a navy of maximum effectiveness.⁷ On the latter date Fiske returned with Capt. H. S. Knapp, John Hood, and James H. Oliver, and Lieut. Comdr. William P. Cronan, Z. H. Madison, and Dudley W. Knox for an evening session in which a program was agreed upon and a plan drawn up for legislation for a Chief of Naval Operations. A bill was prepared by Fiske and the six of-

⁷ This intrigue was first revealed in Fiske, pp. 567 ff. Cf. Senate Committee on Naval Affairs, *Naval Investigation Hearings*, p. 717.

ficers in his office on the morning of January 4.

This bill underwent changes before it passed Congress. Hobson called for the bill and got it through the subcommittee that day. Fiske, Cronan, Madison, and Knox prepared a brief for Hobson that evening. The House Naval Affairs Committee agreed on January 6 to incorporate in the naval appropriation bill a provision for the Chief of Naval Operations. The House struck out this provision, but the Senate Naval Affairs Committee restored it after allowing the Secretary of the Navy to modify it. The original proviso called for a Chief of Naval Operations "who, under the Secretary of the Navy, shall be responsible for the readiness of the Navy for war and be charged with its general direction." This wording was changed upon the recommendation of Secretary Daniels, who regarded the original wording as a "plan to Prussianize the American Navy,"⁸ to provide for a Chief of Naval Operations "who shall under the direction of the Secretary of the Navy be charged with the operations of the fleet, and with the preparation and readiness of plans for its use in war."⁹ Thus altered the proviso passed Congress and was

approved on March 3, 1915. The act also omitted the provision for fifteen naval officers to prepare war plans contained in the Fiske-Hobson draft. Fiske's object in including this provision was to make the appointment of a staff mandatory because he believed it would not be appointed otherwise.¹⁰ Fiske resigned on April 1, 1915, but he was requested to stay on for a while by the Secretary.

Congress and the Secretary in their fear of being ruled by the military had not created a chief of general staff, such as operated in other large countries, but something less than a bureau chief. Hobson's proposal had made the Chief of Naval Operations responsible to the Secretary; consequently there was no real need to deprive this official of the power to exercise general direction of the Navy, which would have involved the necessary supervision of the fleet and the coordination of the work of the bureaus. The effect of the act was to place under the Chief of Naval Operations the operation of the fleet and plans for its use in war, but without authority to issue orders except through the Secretary.¹¹ Despite its defects this new office constituted a further advance towards the attainment of a general staff. Duties not bestowed upon it by law were to accrue to it

⁸ Daniels, p. 243. Congress had been approached by Fiske without the knowledge of the Secretary.

⁹ This is the wording of the act, which is substantially the same as that communicated by Daniels to the Senate Committee on Naval Affairs on Feb. 19, 1915 (see Office of the Secretary of the Navy [abbreviated hereafter to O. S. N.], general files, no. 26255-358:32, National Archives). Published in Senate Committee on Naval Affairs, *Naval Investigation Hearings*, p. 2980. On January 28 Daniels had submitted to L. P. Padgett, Chairman of the House Committee on Naval Affairs, an outline of the tentative duties of the Chief of Naval Operations which embraced the following sections: Historical, Policy, Strategic, Tactical, Logistic, Organization, Mobilization, Training, and Executive; for their specific duties see the letter in *Congressional Record*, 63 Cong., 3 sess., p. 2700.

¹⁰ Senate Committee on Naval Affairs, *Naval Investigation Hearings*, p. 720.

¹¹ For comment on the creation of the Office of the Chief of Naval Operations see Jarvis Butler, "The General Board of the Navy," U. S. Naval Institute, *Proceedings*, LVI (Aug. 1930), p. 703; Richard Wainwright, "The General Board, a Sketch," *ibid.*, XLVIII (Feb. 1922), pp. 191, 201; Elting E. Morison, *Admiral Sims and the American Navy* (Boston, 1942), p. 317; A. W. Johnson, *A Brief History of the Organization of the Navy Department* (Washington, 1935), p. 76; E. W. Eberle, "The Office of the Chief of Naval Operations: Address . . . at the Naval War College, July 1925," Admiral Eberle's Papers, National Archives.

through necessity and custom in subsequent years.

The first Chief of Naval Operations, Rear Admiral William S. Benson, took office on May 11, 1915.¹² A graduate of the Naval Academy in the class of 1879, Benson had had a varied career afloat and ashore. For periods during 1894 to 1896 he was attached to the United States Coast and Geodetic Survey. Both before and subsequent to this service he had tours of duty at the Naval Academy as an instructor. He had never served in the Office of Naval Intelligence or on the General Board, nor had he a diploma from the Naval War College. He had taken the summer course at the college in 1906.¹³ At the time of his appointment he had been serving as commandant of the Philadelphia Navy Yard for nearly two years. Daniels selected him for the new office after studying the records of all the admirals and captains

in the Navy. The appointment raised him to the rank of rear admiral.

Fiske retired as Aid for Operations at this time, and the offices which had composed the Division of Operations of the Fleet were transferred to the jurisdiction of the Office of the Chief of Naval Operations. These offices included the following: the Office of Naval Intelligence under Capt. James H. Oliver, the Naval War College under Rear Admiral Austin M. Knight, the Office of Target Practice and Engineering Competitions under Capt. Roy C. Smith, the Naval Radio Service under Capt. W. H. G. Bullard, and the Office of Naval Aeronautics under Capt. Mark L. Bristol.¹⁴ Except for the President of the Naval War College and the Superintendent of the Naval Radio Service, these officers were called directors. The President of the Board of Inspection and Survey, Capt. Henry B. Wilson, was also placed under Benson on May 11.¹⁵

Together with Assistant Secretary of the Navy Franklin D. Roosevelt, the chiefs of bureaus, the Major General Commandant of the Marine Corps, the Judge Advocate General, and the Solicitor, the Chief of Naval Operations sat on the Secretary's advisory council. This "Navy Council" met weekly to consider naval policies and in the opinion of the Secretary "proved an excellent clearing house, and secured unity and cooperation."¹⁶

In order to enable the Chief of Naval

¹²Naval examining board record of W. S. Benson, National Archives; O. S. N., general files, no. 27325-33; Fiske, p. 585; Senate Committee on Naval Affairs, *Naval Investigation Hearings*, pp. 721, 1817. Daniels had first offered the new post to Rear Admiral Frank F. Fletcher, but Fletcher declined, preferring to remain commander-in-chief of the fleet. The Secretary regarded Benson as the best available officer. He had had contacts with Benson while Benson was commanding the *Utah* and later while Benson was commandant of the Philadelphia Navy Yard. Cf. testimony of Daniels, Senate Committee on Naval Affairs, *Naval Investigation Hearings*, pp. 3020-2. In his autobiography Daniels states that he first considered Rear Admiral Cameron MacRae Winslow, who had also been in line for the position of commander-in-chief when Fletcher was selected for that post; but when Winslow admitted that he believed the Navy should have an organization based on the German general staff plan, the Secretary eliminated him (Daniels, p. 244).

¹³In Senate Committee on Naval Affairs *Naval Investigation Hearings*, p. 1833, Benson stated: "I do not pose as a theoretical War College officer. I am simply a plain sailor and a practical naval officer." But he considered the college very necessary and important and chose for his staff a number of officers who had attended it.

¹⁴Naval examining board records of the officers named. According to Bristol's record, his transfer appears to have been made on May 14. That he was transferred in 1915 is also shown by a memorandum of the Chief of Naval Operations of Oct. 13, 1915, O. S. N., general files, No. 26983-566½. See also *U. S. Navy Directory*, June 1, 1915, p. 74, May 1, 1915, pp. 73-4.

¹⁵Naval examining board record of H. B. Wilson.

¹⁶Daniels, p. 240.

Operations to fulfill the provisions of the act of March 3, 1915, relating to the operation of the fleet and the preparation and readiness of plans for its use in war, the Secretary decided that the duties of the Aid for Material should be placed under the Chief of Naval Operations.¹⁷ Since the functions of the Aid for Operations were taken over by Benson when he assumed office, both these important functions were thereafter under one direction. By order of the Secretary of the Navy of June 25, 1915, the Aid System was discontinued.¹⁸

The important matters of plans, operations, and policy were taken care of by the appointment of Capt. Volney O. Chase, a graduate of the Naval War College, as Assistant for Operations on May 11, 1915.¹⁹ This step marked the beginning of the Division of Operations, which became the most important division in the office. It was charged with the operation of the ships of the Navy and the Naval Auxiliary Service, the formulation of plans for such operations, and the coordination of the work of the Office of Naval Operations and the bureaus and offices of the department.

The functions of the Aid for Material were largely transferred to the Division of Material with the appointment of Capt. Josiah S. McKean, an expert in logistics and a graduate and former member of the

faculty of the Naval War College, as Assistant for Material on July 1, 1915.²⁰ The important duty of coordinating the work of the material bureaus of the department in maintaining the fleet in readiness for war was placed under this officer. The bureau chiefs were unanimously in favor of the continuation of such a position in the department.²¹ McKean immediately busied himself in increasing the stores of industrial supplies and ship supplies on hand, improving the material condition of the Navy, and in building up the navy yards to a point where they could maintain the efficiency of the fleet.²² During the fleet evolutions of 1915 and 1916, a test of the readiness of the facilities of the department for war was made. One of the important results of this mobilization was the consolidation of all the means of communication in the Communication Division of the Office of the Chief of Naval Operations in 1915.²³

DIVISION OF NAVAL MILITIA

From 1891, when the Federal Government first extended some financial support to the naval militia of the states, administrative matters connected therewith were

¹⁷ Testimony of Daniels, May 17, 1920, Senate Committee on Naval Affairs, *Naval Investigation Hearings*, pp. 2315-6.

¹⁸ *Changes in Navy Regulations*, no. 5, July 15, 1915, effected this change so far as the regulations were concerned.

¹⁹ Naval examining board record of V. O. Chase; *U. S. Navy Register*, Jan. 1, 1917, pp. 10, 315; Henry B. Anderson, *Paper Treating of Matters Concerning Naval Districts*, Sept. 27, 1918 (69 Cong., 2 sess., Senate committee print, Washington, 1927), pp. 34-8.

²⁰ Naval examining board record of J. S. McKean; *U. S. Navy Register*, Jan., 1917, p. 19; House Committee on Naval Affairs, *Hearings . . . on Estimates Submitted by the Secretary of the Navy, 1916* (Washington, 1916), p. 1705; Senate Committee on Naval Affairs, *Naval Investigation Hearings*, p. 1616. Supervision of the repairs and alterations on ships had been under departmental direction since 1890. See on this question Navy Dept., *Annual Report*, 1892, p. 48; 1911, p. 7; Charles O. Paullin, "A Half Century of Naval Administration in America, 1861-1911," *U. S. Naval Inst., Proc.*, XXXIX (Dec. 1913), 1252.

²¹ D. W. Taylor, "Navy Department Organization—Past, Present and Possible," Oct. 1920, p. 51, *O. S. N.*, general files, no. 27325-38½.

²² Senate Committee on Naval Affairs, *Naval Investigation Hearings*, p. 1624

²³ *Ibid.*, p. 1626.

handed by the Assistant Secretary of the Navy until December 1, 1909. At this date naval militia affairs were placed under the Division of Personnel²⁴ in which there was established by the naval appropriation act of March 4, 1911, an Office of Naval Militia.²⁵ On December 30, 1912, this office was placed under the Bureau of Navigation in conjunction with naval district matters.²⁶ The naval militia was brought under Federal control by the act of February 16, 1914, and pursuant to the provisions of this act the Division of Naval Militia Affairs was established in the Bureau of Navigation on April 12, 1914.²⁷ This division was transferred to the Office of the Chief of Naval Operations in May, 1915.²⁸ When the Naval Reserve Force was created by the act of Congress of August 29, 1916, its administration was placed under the Bureau of Navigation by order of the Secretary of the Navy of September 22, 1916, and the Division of Naval Militia Affairs was returned to that bureau.²⁹

DIVISION OF NAVAL DISTRICTS

There was a general belief during the 1880's and 1890's that our coasts were vulnerable to attack by ironclad monitors, and during the Spanish War the Navy Department had to assign vessels for the protection

of seaports on the Atlantic to allay the panic of their inhabitants. When war with Spain appeared imminent in March, 1898, Commander Horace Elmer was directed by the Navy Department to ascertain what vessels could be used for naval purposes, how they could be provided with armament and officers and crews, and to prepare an organization for the whole coast.³⁰ He established his headquarters at the New York Navy Yard and began the development of what came to be called the Coast Defense System or the Mosquito Flotilla. The districts were made to conform with the lighthouse districts functioning under the Treasury Department in order to utilize the naval officers detailed as inspectors of the lighthouse districts as commandants of the coast defense districts. At the time war was declared on April 25, 1898, Commander Elmer died; he was immediately succeeded by Rear Admiral Henry Erben, who on May 26 became the chief of the United States Auxiliary Naval Force which was established by a joint resolution adopted by Congress on that date. The vessels purchased by the Board on Auxiliary Vessels for this force were manned by the naval militias of the states. The headquarters of the force was moved from New York to Washington in July when Capt. John R. Bartlett, who was then serving as Chief Intelligence Officer and Superintendent of the Coast Signal Service, assumed the additional duty of directing the Auxiliary Naval Force. Captain Bartlett replaced the lighthouse inspectors with senior officers of the naval militia as his assistants in the coast defense districts. The force came to comprise 41 vessels and 263 officers and 3,832 men of the naval militia commissioned and enlisted in the Navy to operate

²⁴ By *Changes in Navy Regulations*, no. 6, Nov. 8, 1909.

²⁵ Superintendent of Documents, *Checklist of United States Public Documents, 1789-1909* (Washington, 1911), p. 698.

²⁶ By Navy Dept. general order no. 251, Dec. 30, 1912.

²⁷ Navy Dept., *Annual Report*, 1914, pp. 195-6; 1918, p. 67.

²⁸ Naval examining board record of F. B. Bassett, Jr.

²⁹ O. S. N., general files, nos. 3973-164 and 3973-68; *U. S. Navy Directory*, Dec. 1, 1916, p. 105; Oct. 1, 1916, p. 101.

³⁰ Navy Dept., *Annual Report*. 1898, I, 106 #

in the nine districts established on the coasts of the country. Hardly had the force been organized, however, when the war was over, and before the end of September, 1898, it was demobilized.

The experience of the Spanish War showed the need for the development of a permanent system for the naval defense of the coasts of the United States. After the war the General Board considered the matter and drew up plans involving the use of auxiliary vessels. In 1902 Rear Admiral Henry C. Taylor, Chief of the Bureau of Navigation, presented for the consideration of the General Board the subject of a proper system for the naval defense of the coast, particularly the question of rendezvous for torpedo boats and like craft, the naval militia, anchorages for the fleet in time of war, communications, and the formation of a naval reserve.³¹ The result was the establishment of three experimental naval defense districts along the coast in the same year. These were displaced in 1903 by thirteen naval districts on the sea and lake coasts under commandants, who were then functioning generally as commandants of navy yards, and who were to be under the supervision of the Bureau of Navigation.³² Regulations for the government of naval districts issued by the department in 1906 prescribed the duties they were to perform in time of war. Better departmental administration of the naval districts was provided in 1912 when an Office of Naval Militia Affairs and Naval Districts was created in the Bureau of Navigation.³³ The supervisors of the districts

were made responsible at this time for the following duties: (a) organization and maintenance of the district, (b) the naval patrol of the district, (c) the instruction of naval militia officers, (d) the coordination of services of information in the district. Such was the status of naval district matters when in May, 1915, Capt. Frederic B. Bassett, Jr., the officer in charge of what had become the Division of Naval Militia Affairs, was transferred to the Office of the Chief of Naval Operations.

A further change in the administration of naval districts resulted from the deliberations and recommendations of a board for the revision of the regulations for the government of naval districts, which met under the presidency of Capt. V. O. Chase from June 1 to July 21, 1915. In its report submitted on November 10 the board recommended the establishment of a separate Office of Naval Districts under a commissioned officer not below the rank of captain with the designation Director of Naval Districts.³⁴ The direction of naval district affairs then in existence had no driving force, in the opinion of the board, because the officer in charge had other paramount duties. Adopting this recommendation, the Secretary issued an order on April 18, 1916, which transferred the Office of Naval Districts from the Division of Naval Militia Affairs and placed it under the Chief of Naval Operations.³⁵ Capt. George R. Marvell was assigned to the direction of what became the Division of Naval Districts on May 3, 1916.³⁶

Conceived at first as a means of provid-

³¹ *Ibid.*, 1902, p. 397.

³² By Navy Dept. general order no. 128, May 7, 1903; Navy Dept., *Annual Report*, 1903, p. 494.

³³ By Navy Dept. general order no. 251, Dec. 30, 1912.

³⁴ O. S. N., general files, no. 24514-39:1.

³⁵ *Ibid.*, nos. 24514-39:6 and 24514-39:8.

³⁶ *Ibid.*, no. 24514-39:4; *U. S. Navy Directory*, Jan. 1, 1917, p. 12; naval examining board record of G. R. Marvell; Anderson, p. 25.

ing naval defense of the coasts, the naval district system gradually developed into an organization for the regional administration of the shore establishments of the Navy. This change was hastened by the impact of the war during which the districts came to perform a vital role.

OFFICE OF THE CHIEF OF NAVAL OPERATIONS IN 1916

The manner in which the Office of the Chief of Naval Operations was working by the year 1916 is shown in the following statement by its chief:

Section I—Information. Before any intelligent plans can be made or any effective work accomplished, complete and comprehensive information is necessary. The duty of collecting and disseminating information is assigned to the Office of Naval Intelligence.

Section II—Education. This section is represented in the main by the Naval War College, where the conduct of war on the sea is made the special object of research and study, and where officers are given the opportunity to train themselves in the conduct of war.

Section III—Planning. This is the deliberative section to which information gathered by Section I and experience and training gathered by Section II are brought. Here, free from all administrative work, plans are deliberated upon, perfected and submitted for the Secretary's approval and final adoption. This section is now the General Board, of which the Chief of Naval Operations is a member. It fills a vital office of the general function of preparing the fleet and operating it in war.

Section IV—Inspections. This section applies the test of inspection. It tests the preparedness of the fleet for war. Material preparedness of the ships is tested by the Inspection Board, gunnery preparedness by target practice, and steaming efficiency by annual steaming competition.

In that connection I might state that testing the preparedness of the fleet for war is accomplished or is expected to be accomplished—it has been begun by the so-called maneuvers. We have had two during my term of office, one that

was formulated before I took charge of the office and another after I took charge of the office. The method in which these maneuvers are performed is intended to give the department a clear and definite idea as to the general preparedness of the fleet to meet an enemy.

Section V—Execution. This is the last section. It is charged with the duty of carrying out approved policies and plans, and is under the immediate supervision of the Chief of Naval Operations.³⁷

The organization which carried out the foregoing general plan was as follows:

1. Division of Operations—organization of the Office of Operations; naval policies; military characteristics of ships, building programs; fleet maneuvers; and organization and employment of fleets.
2. Plans—plans, war portfolios, and reports on preparedness for war.
3. Naval districts—operations of mining and operations of naval districts.
4. Regulations, records—aid to Chief of Naval Operations, Navy Regulations, general orders, custody of files, and matters requiring coordination of other executive departments.
5. Movements of ships—movement orders—that is, military movements; schedule of employment of forces; records of service of fleets and vessels; military operations of naval forces on shore and reports of naval operations; movement orders (logistic); logistic establishments afloat, and naval auxiliary service.
6. Communications — and that includes the radio, cable, telegraph, and telephone service—censorship, signals, and codes. Communications office.
7. Publicity—that is, general news and movements given out to the public, distribution of current communications, censorship, and press notices.
8. Matériel division—logistics of the office; location, characteristics, and development of bases, supplies, and reservations, and coordination of material bureaus.³⁸

Such was the outline of the organization

³⁷ House committee on Naval Affairs, *Hearings* . . . 1916, p. 3105.

³⁸ *Ibid.*, p. 3104.

of the Office of the Chief of Naval Operations as it existed in March, 1916. Benson indicated that one of the divisions—that handling plans—was not well under way, for the officer who had been chosen to head it was abroad.

The execution of approved policies and plans was performed under the immediate supervision of Benson by the Division of Operations, which then had cognizance of the movements of ships, naval policies, plans, communications, and naval districts; and by the Division of Matériel, as it was then being designated, which had charge of the logistics and the material preparedness of the fleet.³⁹

After the destructiveness of submarine mines had been demonstrated in the Russo-Japanese war the principal navies of the world, including that of the United States, began the development of this form of naval warfare.⁴⁰ The General Board in 1906 recommended the conversion of one or more cruisers of the *San Francisco* or *Baltimore* type into mine layers, but the *San Francisco* was not altered for this duty until 1911, and in the meantime some mines which had been purchased abroad had never been experimented with. The use of mines in the European War of 1914 caused the United States in November of that year to assign an officer in the Bureau of Ordnance to handle the subject.⁴¹ This officer, Comdr. George R. Marvell, prepared in 1915 a paper on "Mines and Mining" in which he discussed foreign practices in the use of mines and means of defending the United States against their use. The Of-



REAR ADMIRAL BRADLEY A. FISKE
Aid for Operations, 1913-1915

fice of the Chief of Naval Operations also interested itself in this subject. When a mining division was organized in the Atlantic Fleet in July, 1915, it consisted of three mine planters and four mine sweepers—none of which had been specially constructed for the purpose.⁴² Efforts were made to increase the number of these vessels and the manufacture of mines, and to practice the Navy in their use.

The first clerical force was provided for the Office of the Chief of Naval Operations by the act of May 10, 1916. Such help as it had had previously was furnished by the Bureau of Navigation, the Office of the Secretary, and the assistants who had

³⁹ *Ibid.*, p. 3106.

⁴⁰ Philip R. Alger, "The Employment of Submarine Mines in Future Naval Wars," U. S. Naval Inst., *Proc.*, XL (Sept. 1908), 1039-1042.

⁴¹ Navy Dept., *Annual Report*, 1915, pp. 305-6.

⁴² House Committee on Naval Affairs, *Hearings* . . . 1916. p. 3115.

been supplied by the bureaus to the four aids.

The status of the office was improved by the passage of the act of August 29, 1916. The rank and title of the Chief of Naval Operations was raised to Admiral, and he was to take rank after the Admiral of the Navy, who was then George Dewey. This placed the Chief of Naval Operations above the commanders-in-chief of the fleet, thus increasing the importance of his office. Upon the death of Dewey in 1917 he became the ranking officer in the Navy. The fifteen officers denied in the preceding year were now conceded. The act also contained the following provision: "All orders issued by the Chief of Naval Operations in performing the duties assigned to him shall be performed under the authority of the Secretary of the Navy, and his orders shall be considered as emanating from the Secretary, and shall have full force and effect as such." Previously, except for orders given to officers immediately under him, orders issued by the Chief of Naval Operations were signed by the Secretary of the Navy.⁴³

The sinking of passenger and freight vessels by German submarines accompanied by the loss of American lives had brought relations between the United States and Germany near the breaking point. Steps towards preparation for war became more urgent and less unpopular. Accordingly the act of August 29, 1916, provided over 312 million dollars for naval construction, authorized the President to increase the Navy in case of emergency, and transformed the naval militia into the Naval Reserve Force.

Following the passage of the foregoing

act navy regulations were changed to read as follows:

126. (1) The Chief of Naval Operations shall, under the direction of the Secretary of the Navy, be charged with the operations of the Fleet and with the preparation and readiness of plans for its use in war. (Act Mar. 3, 1915).

(2) This shall include the direction of the Naval War College, the Office of Naval Intelligence, the Office of Gunnery Exercises and Engineering Performances, the operation of the Communication Service, the operations of the aeronautic service, of mines and mining, of the Naval Districts, Naval Militia, and of the Coast Guard when operating with the Navy; the direction of all strategic and tactical matters, organization, maneuvers, gunnery exercises, drills and exercises, and of the training of the Fleet for war; and the preparation and revision and enforcement of all drill books, signal codes, and cipher codes.

(3) The Chief of Naval Operations shall be charged with the preparation, revision and record of Regulations for the Government of the Navy, Naval Instructions, and General Orders.

(4) He shall advise the Secretary concerning the movements and operations of vessels of the Navy and prepare all orders issued by the Secretary in regard thereto, and shall keep the records of service of all fleets, squadrons, and ships.

(5) He shall advise the Secretary in regard to the military features of all new ships and as to any proposed extensive alterations of a ship which will affect her military value, and all features which affect the military value of dry docks, including their location; also as to matters pertaining to fuel reservations and depots, the location of radio stations, reserves of ordnance and ammunition, fuel, stores, and other supplies of whatsoever nature, with a view to meeting effectively the demands of the Fleet.

(6) He shall advise the Secretary of the Navy on all business of the department in regard to foreign relations, and all correspondence in regard to these matters shall be presented for the department's action through his office.

(7) In preparing and maintaining in readiness plans for the use of the Fleet in war, he

⁴³ *Ibid.*, p. 3134.

shall freely consult with and have the advice and assistance of the various bureaus, boards, and offices of the department, including the Marine Corps headquarters, in matters coming under their cognizance. After the approval of any given war plans by the Secretary it shall be the duty of the Chief of Naval Operations to assign to the bureaus, boards, and offices such parts thereof as may be needed for the intelligent carrying out of their respective duties in regard to such plans.

(8) The Chief of Naval Operations shall from time to time witness the operations of the Fleet as an observer.

(9) He shall have two principal senior assistants, officers not below the grade of captain, one as assistant for operations and the other as assistant for material.

(10) He shall ex officio be a member of the General Board.⁴⁴

A number of additional officers were detailed to the Office of the Chief of Naval Operations during the latter part of 1916. It seems to have gotten along pretty well before the act of 1916, for the officers attached to the offices which were placed under its jurisdiction were transferred with the offices. Additional officers had also been detailed to it in 1915.

The Office of Target Practice and Engineering Competitions became on April 22, 1916, the Office of Gunnery Exercises and Engineering Performances.⁴⁵ The director was then Capt. Charles P. Plunkett, who had been recommended to Benson by Capt. William S. Sims.

The Office of Naval Intelligence considerably expanded its activities during 1915-1916 because of the European War and of war preparations in this country. A War

Information Service was inaugurated in October, 1915, to develop our sources of information at home and abroad.⁴⁶ The staffs of naval attachés were enlarged by adding professional and civilian assistants, whose work was to secure not only naval but also military, economic, and political information. They also performed investigative work. Aids for information were assigned to naval district headquarters to supervise intelligence work connected with shipping, surveillance of the coast, enemy submarine bases, and illegal radio stations. A branch intelligence office was established in New York in the fall of 1916 to be followed by others in large cities. Their work was to investigate and guard manufacturing plants having naval contracts.

A reorganization of the administration of naval communications designed to put the communications system on a war basis was carried out in 1916 upon the recommendations of a board on radio organization. The Naval Radio Service was changed to the Naval Communications Service and the Superintendent of the Radio Service to Director Naval Communications.⁴⁷ In addition to radio the new service was to be responsible for the efficient handling of all telegraph, telephone, cable, and generally all despatch work between the Navy Department and the fleet, and throughout the naval services outside the fleet. All means of communication were consolidated in a communications center in the Navy Depart-

⁴⁴ Navy Dept., *Regulations for the Government of the Navy of the United States, 1913* (reprinted with all changes up to and including no. 10, Washington, 1918), p. 15 f.

⁴⁵ By Navy Dept. general order no. 209, Apr. 22, 1916.

⁴⁶ Edward McCauley, "The Office of Naval Intelligence Before and During the World War" (1920), p. 1, MS among materials from Office of Naval Records and Library, National Archives; Senate Committee on Naval Affairs, *Naval Investigation Hearings*, pp. 2710-6.

⁴⁷ By Navy Dept. general order no. 226, July 28, 1916; Navy Dept., *Annual Report, 1916*, p. 89; S. W. Bryant, "United States Naval Communication Service," *Franklin Institute, Journal*, CLXXXVIII (Dec. 1919), 752.

ment building in a room adjacent to the office of the Secretary and the Chief of Naval Operations.⁴⁸ The following new positions were set up under the director: Pacific Coast Communication Superintendent, Assistant for Communications and Communication Officer, Navy Department, Assistant for Administration and Atlantic Coast Communication Superintendent, and district communication superintendents were designated at the naval district headquarters.⁴⁹ The removal of the director, Capt. David W. Todd, from the radio station in Arlington to Washington was approved by the Secretary in December, 1916.⁵⁰

The act of March 3, 1915, establishing the Office of the Chief of Naval Operations charged it with the readiness of plans for the use of the fleet in time of war. On May 28, 1915, a plan of the General Board indicating the duties to be performed by each bureau and office of the department was communicated to them in an order prepared by the Chief of Naval Operations.⁵¹ Thereafter the bureaus submitted quarterly reports of preparedness to the department. During the early days of the Office of the Chief of Naval Operation, the General Board was relied upon for plans, but its studies were of too general a character.⁵² Admiral Benson intended to form a plans division in his office to analyze the reports of the General Board and to prepare detailed plans, but he was unable to accomplish this because of the shortage of officers

in the Navy.⁵³ When he testified before the House Committee on Naval Affairs in March, 1916, he stated that he had an officer in mind to handle plans but that he was abroad. In the following month this officer, Comdr. Frank H. Schofield, was detached from command of the *Chester*, and on May 10 he reported to the Chief of Naval Operations.⁵⁴ He was well qualified for the post, for he had been an instructor at the Naval War College from September, 1911, to October, 1913. Captain Schofield devoted himself to war plans, but no planning section was established in the office during 1916.⁵⁵ During the winter of 1916-1917 he was joined in the work by Comdr. William P. Scott.

JOINT MERCHANT VESSEL BOARD

Adopting the recommendation of the General Board,⁵⁶ the Secretary of the Navy in January, 1914, instructed the commanders of certain navy yards to conduct inspections of merchant vessels as opportunity afforded in order to determine their suitability and availability for use as naval auxiliaries in time of war.⁵⁷ Inspection boards were furnished by the Office of Naval Intelligence. This office had already collected some information of this character, but its files were incomplete.⁵⁸ After being considered by the bureaus and approved by the department the reports were filed with the

⁵³ *Ibid.*, p. 3132; Senate Committee on Naval Affairs, *Naval Investigation Hearings*, p. 1894.

⁵⁴ Naval examining board record of F. H. Schofield; *U. S. Navy Register*, Jan. 1, 1917, p. 14; Senate Committee on Naval Affairs, *Naval Investigation Hearings*, pp. 1619-20.

⁵⁵ O. S. N., general files, no. 4343-111:2.

⁵⁶ *Ibid.*, nos. 5194-4 and 5194-6.

⁵⁷ *Ibid.*, no. 5194-11.

⁵⁸ W. F. Bricker to K. M. Bennett, Feb. 28, 1914. Office of Naval Intelligence, Merchant vessels and their suitability, National Archives.

⁴⁸ O. S. N., general files, no. 4343-111:2; House Committee on Naval Affairs, *Hearings . . . 1916*, p. 3113.

⁴⁹ O. S. N., general files, no. 28578-48.

⁵⁰ *Ibid.*, no. 5303-155.

⁵¹ Senate Committee on Naval Affairs, *Naval Investigation Hearings*, p. 2047.

⁵² *Ibid.*, p. 1916; House Committee on Naval Affairs, *Hearings . . . 1916*, pp. 1718-9, 3110.

Office of Naval Intelligence.

The members of the Board of Inspection and Survey for Ships, Capts. H. B. Wilson and Emil Theiss, and Naval Constructor G. H. Rock, were ordered to New York in April, 1914, to conduct similar inspections of merchant ships.⁵⁹ These inspections were performed in a desultory fashion until the establishment of the Office of the Chief of Naval Operations. Additional officers were then appointed to the board upon the recommendation of the Chief of Naval Operations in order to enable it to take care of this important work, the vital character of which was fully recognized by the department.⁶⁰ These appointments made it possible to perform the work on a more regular basis.

In connection with the inspection of the merchant vessels every measure was taken to put the department in a position to prepare them for use in case of war: The exact purpose for which each vessel would be utilized was determined according to characteristics laid down by the General Board. Plans of the vessels were obtained and other plans were prepared for use in making alterations. These plans were filed in the bureaus concerned, and copies were sent to the navy yards chosen to do the work. Material was obtained to make the changes, and steps were taken to equip and arm the vessels. Contracts were even prepared for signature.⁶¹

In the summer of 1916 arrangements were perfected with the War Department

for the joint conduct of the inspections in order to avoid conflicts. Several officers, including the new president of the Board of Inspection and Survey, Capt. William A. Gill, were designated to serve with army officers upon the Joint Army and Navy Board of Survey for Merchant Vessels.⁶² Thereafter all inspections were made under the direction of this board. The first meeting of the board took place on October 9, 1916; Captain Gill became its senior member.⁶³ A modified procedure was adopted in January, 1917, by which a Headquarters Section to handle the administrative work of the board as a whole was established in the Navy Department, and district sections were organized in the naval districts composed of naval and army officers to inspect such vessels as were designated by the Headquarters Section.⁶⁴ The Office of Naval Intelligence was charged with the function of keeping records pertaining to the vessels inspected. The shorter designation of Joint Merchant Vessel Board was approved in May, 1917.⁶⁵ This board has remained a part of the Board of Inspection and Survey.

WORLD WAR

By the time that war was declared against Germany on April 6, 1917, the Office of the Chief of Naval Operations had had almost two years in which to organize. That job was incomplete when the war neces-

⁵⁹ O. S. N., general files, no. 5194-21.

⁶⁰ Chief of Naval Operations to the bureaus, June 10, 1915, *ibid.*, no. 5194-40; Navy Dept., *Annual Report*, 1915, p. 10. This order prescribed the procedure that was to be followed.

⁶¹ House Committee on Naval Affairs, *Hearings* . . . 1916, pp. 3109-10; Senate Committee on Naval Affairs, *Naval Investigation Hearings*, p. 1821.

⁶² O. S. N., general files, nos. 5194-226 and 5194-226:1; *U. S. Navy Directory*, Jan. 1, 1917, p. 10; Anderson, p. 28.

⁶³ O. S. N., general files, no. 5194-226:1; envelope marked "Report of board meeting," Joint Merchant Vessel Board files, National Archives.

⁶⁴ O. S. N., general files, nos. 5194-226:3, 5194-226:4, 5194-226:5, 5194-226:19.

⁶⁵ *Ibid.*, no. 5194-713.



ADMIRAL WILLIAM S. BENSON
Chief of Naval Operations, 1915-1919

sitated the establishment of new activities. In January, 1917, the number of persons employed was seventy-five. This force was much expanded during the war. Capt. William V. Pratt was added to the staff part time on February 7 and full time on May 10. Upon the death of Captain Chase, as a result of overwork, on June 25, 1917, Pratt succeeded him as Assistant for Operations. Some time later he was appointed Assistant Chief of Naval Operations under the act of August 29, 1916, which provided

that one of the officers to be detailed to the Chief of Naval Operations might be so designated. In November, 1917, he acted as Chief of Naval Operations during Admiral Benson's absence in Europe to attend an important war conference in Paris.

Training was conducted by the Office of Gunnery Exercises and Engineering Performances by the system that was already in use. Besides training men for the regular warships, gun crews were also trained for numerous district craft and for the

armed guards on merchant vessels.⁶⁶ Rifle ranges were operated at a number of places which were used by the Navy, the Army, the Marine Corps, the state guards, and private citizens. Training of enlisted personnel of the Navy in the use of small arms and machine guns was conducted by the Small Arms Section.

The Naval Communications Service carried on expanded activities at home and abroad. Prior to the war it had handled the censorship of radio stations according to the President's neutrality proclamation of August 5, 1914. Censorship was now extended to the fifty-five radio stations in operation along the coasts of the United States and its possessions. About an equal number of commercial stations were taken over, and half as many stations were closed. Commercial communication was suspended on the Atlantic and Gulf coasts, only routine steamship business being permitted under censorship. Offices were established at all important ports for issuing secret codes, ciphers, recognition signals, and radio calls. To facilitate communication with the Allies, cooperation was had with them in these matters. Sixty-seven land radio stations were built by the Navy during the war; naval and merchant vessels were equipped with radio apparatus and trained operators. Communication facilities were constructed in France, England, and Italy to assist in military operations. High-powered stations were erected to provide communication between the United States and abroad and to disseminate propaganda. By the end of the war, the Navy Department had a radio

system which provided communication around the world.⁶⁷

An expansion of the organization of the Office of the Director Naval Communications was necessary to handle the foregoing services, several units being added to those already in existence.⁶⁸ An Assistant Director Naval Communications was appointed under whom came the following sections: Radio Communications, Land Line, Personnel, Commercial Traffic, Code and Signal, and Files. The Land Line Division was concerned with telephone and telegraph communications of shore establishments of the Navy. To assist the director with censorship matters, an Assistant Chief Cable Censor was designated. The activities of the Naval Communication Service in the field were administered by the Atlantic Coast Communication Superintendent, the Pacific Coast Communication Superintendent, and the Philippine Communication Superintendent. The communication districts were arranged to coincide with the naval districts under whose commandants the district communication superintendents came, although they also received orders from the coast superintendents. The Navy Shipping Information Office was located at New York, where it had been initiated by the District Communication Superintendent to supply information about the movements of ships which the newspapers had been prohibited from publishing after the outbreak of war. Publication of the daily shipping bulletin was continued after the

⁶⁶ On the subject of gunnery from 1915 to 1918 see testimony of Rear Admiral C. P. Plunkett, Senate Committee on Naval Affairs, *Naval Investigation Hearings*, pp. 516-8. Plunkett became Director of Gunnery Exercises and Engineering Performances in 1915.

⁶⁷ O. S. N., general files, no. 5087-143:8; Brvant, *loc. cit.*, pp. 754 ff.; Senate Committee on Naval Affairs, *Naval Investigation Hearings*, pp. 2580 ff.

⁶⁸ Frederick P. Guthrie, "History of Naval Communication Service" (1919), MS among materials from Office of Naval Records and Library, National Archives.

war, being transferred to the United States Shipping Board.

Enemy submarines by using their radios could assist each other in hunting down victims. But when radio compass stations were located along the Atlantic and Gulf coasts the submarines gave their own locations away whenever they used their radios; consequently they stopped doing so. Those stations were also useful in communicating bearings to ships at sea.

Towards the close of 1917, the Division of Operations of the Officer of the Chief of Naval Operations comprised the following sections:

1. *Policy*: Naval policies; organization and employment of fleets; Fleet maneuvers; Building programs and characteristics of ships; Organization of Office of Naval Operations.

2. *Plans*: War plans and war portfolios; Mobilization, Examination of reports on preparedness for war, International law.

3. *Naval districts* (Coast): District policy, plans, neutrality, etc.; Operations of Naval Districts; Operations of mining and mine sweeping; Operations of submarine nets; Purchase, lease, and charter of vessels under the Commandeering Act.

4. *Ships movements*: Movements of naval vessels; orders for, and records of; Schedules of employment of ships. Handle all mail for signature of CNO; Vise mail of Assistant for Material with view to coordinating whole office; Vise incoming despatches and follow up action.

5. *Shore forces* (Naval and Marine Corps): Military operations of naval forces on shore; Military operations of overseas bases; Cooperations with State Department.

6. *Supply*: Operations of naval supply in deep sea bottoms.

7. *Communications*: Transmission, routing, and handling of all dispatches to and from the Navy Department; Coding and decoding operations.

8. *Publicity*: Dissemination of matter to press and censorship thereof; Navy Regulations and General Orders; Drill and Handbooks (non-confidential); Miscellaneous letters of inquiry.

9. *Armed guards*: Operations and administration of armed guards for merchant ships.

10. *Staff* (to CNO): Supervision of rooms and custody of files; Coordination of Bureaus and other government Depts. Personnel matters (naval).⁶⁹

At the same time the Division of Material was organized as follows:

1. *Logistics*: Location, characteristics, development of shore bases; Supplies and reserves; Coordination of Material Bureaus of Navy Department.

2. *Repairs*: Inspection reports, examination of; Material repairs to ships (including aircraft).

The activities to be carried on by the naval districts during war were prescribed in changes in navy regulations issued after the creation of the Division of Naval Districts. The commandants were made responsible for

(a) The efficient local defense of the district in accordance with the approved war plan.

(b) The maintenance of an efficient information service in accordance with instructions which shall be prepared by the Office of Naval Intelligence.

(c) The maintenance of an efficient communication service in accordance with instructions which shall be prepared by the office of communications.

(d) The promotion of the military interests of the United States generally within the limits of his authority.⁷⁰

The commandant was to have the assistance of an assistant district commandant and such additional staff as might be required. The Hydrographer, branch hydrographic offices, and Director Naval Communications

⁶⁹ Memorandum from Chief of Naval Operations for Mr. Scully, Council of National Defense, Nov. 5, 1917, among materials from Office of Naval Records and Library, National Archives.

⁷⁰ Navy Dept., *Regulations for the Government of the Navy of the United States, 1913* (reprinted with all changes up to and including no. 9, Washington, 1917), p. 40.

were to cooperate in the collection and exchange of information. Radio stations were to be under the control of the commandants through the district communication superintendents.

After the outbreak of war, the activities already planned for the naval districts and others which developed in the course of the conflict were undertaken by them. The operation and direction of the vessels engaged in patrolling the coast were placed under the district commandants, who thus gained control of all the naval, Coast Guard, Coast and Geodetic Survey, Light-house Service, and Fish Commission vessels, which were utilized for this duty. In order to delimit their jurisdictions more clearly, the naval districts were extended inland in 1917 to comprise areas including certain states and portions of states adjacent to the stretches of coast previously assigned to them.⁷¹ Within the districts thus designated, the commandants came to exercise more extended powers. To carry on the greatly augmented work of the Navy resulting from the war, it was found necessary to decentralize authority in the hands of the district commandants, who were given supervision of all activities carried on in their districts.⁷² The operations performed by the districts included patrol and defense of the coast, mine sweeping, communications, information, industrial developments, housing facilities, and commandeering the vessels. When enemy submarine activities on the Atlantic coast forced the adoption of coastwise convoys in 1917, their conduct was assigned to the naval districts. In order to carry on these activities, the districts were obliged to add accounting, disbursing, and supply departments to their

organizations. To maintain the health of men serving in the district or undergoing training at naval stations and the sanitation of these establishments, medical aids and sanitation officers were attached to the district headquarters.⁷³ Just as it had been necessary to set up district limits on land, district boundaries at sea became desirable as a result of the operations of naval craft in coastal waters and at sea, so in May, 1918, the sea was divided among the districts by degrees and minutes of latitude and longitude. Military activities not related to the industrial work carried on by navy yards, such as receiving ships, marine barracks, naval hospitals, medical supply departments, electrical schools, ammunition depots, armed guard activities, supply activities, and storage facilities, were transferred to the jurisdiction of the district commandants in February, 1918.⁷⁴ The experience acquired by the naval districts during the war was embodied in the *Naval District Manual* published in 1921.

CHIEF CABLE CENSOR

An Executive order of April 28, 1917, placed the censorship of telephone and telegraph lines leading out of or into the country under the War Department and the censorship of submarine cables under the Navy Department. The Secretary of the Navy on April 30 appointed Capt. D. W. Todd Chief Cable Censor, in addition to his other duties, to censor cables transmitted over cables touching territory of the United States or the Republic of Panama, except in the Philippine Islands.⁷⁵ Trans-Atlantic

⁷³ *Ibid.*, p. 1381.

⁷⁴ Navy Dept. general order no. 372, Feb. 28, 1918.

⁷⁵ O. S. N., general files, no. 5303-155:4; James R. Mock, *Censorship 1917* (Princeton, 1941), pp. 80 ff.

⁷¹ See Hydrographic Office chart 5172, April 1917.

⁷² Navy Dept., *Annual Report*, 1918, pp. 20-1.

cables were not included until the night of July 25-26. Cable censors were established at coast points where the cables touched and at the capital cities of island possessions; the principal place was at New York. Cable censorship was maintained after the armistice until the end of June, 1919, as a means of control over Germany during the peace negotiations.

OFFICE OF NAVAL AVIATION

Naval aviation at the outbreak of the war was under the general supervision of the Assistant for Material, Capt. J. S. McKean, and under the direct charge of Lieut. John H. Towers. At the time there were 38 officers and 163 men in the aviation service and one air station at Pensacola.⁷⁶ The officers in charge had an office force of one clerk. Comdr. Noble E. Irwin was placed in charge of aviation on May 18, 1917, under the Assistant for Material, Towers continuing as his assistant; they both remained in these positions for the duration of the war.⁷⁷ In the following July aviation was separated from the Division of Material and moved to the Navy Annex. After the establishment of the Office of Naval Aviation on March 7, 1918,⁷⁸ Captain Irwin was directly responsible to the Chief of Naval Operations. Under the management of this office naval aviation was considerably expanded, but it was not until towards the end of the war that it began

taking an effective part in Europe. Training of aviators was conducted at the naval air station at Pensacola, which had been established in 1914. The first detachment of aviators landed in France in June, 1917, and began the construction of bases; others were built in Ireland, England, and Italy, but it was almost a year later before the first American aircraft reached France. Both the aircraft industry of the country and the naval air service had been little developed before the war.

ARMED GUARD SECTION

After the announcement by Germany on January 31, 1917, of her intention to sink all vessels found in a war zone around Great Britain and France, the United States was forced to adopt the practice of the Allied Powers and arm her merchantmen entering the forbidden area. The first ships to be equipped with defensive armament were vessels of the American Line. A dozen ships were so armed between March 13, when arming was ordered, and the declaration of war. Upon the entry of the United States into the war, merchantmen passing through the war zone were armed as rapidly as possible, a total of 367 eventually being equipped with six-inch guns. After the extension of submarine warfare to the western Atlantic, coastwise vessels were also armed. Guns of somewhat heavier caliber were placed upon the troop transports, which were usually larger ships. The gun crews were trained by the Navy under the supervision of the Training Division of the Bureau of Navigation.⁷⁹

⁷⁶ O. S. N., general files, no. 3084-D-14.

⁷⁷ Naval examining board record of N. E. Irwin; *U. S. Naval Register*, Jan. 1, 1919, p. 14; W. H. Sitz, *A History of Naval Aviation* (Washington, 1930), p. 9; Harold B. Miller, *Navy Wings* (New York, 1937), p. 191; Senate Committee on Naval Affairs, *Naval Investigation Hearings*, p. 2681.

⁷⁸ By Navy Dept. general order no. 375, Mar. 7, 1918.

⁷⁹ Ernest L. Bennett, "History of the Training Division, Bureau of Navigation" (1920), pp. 214-22, MS among materials from Office of Naval Records and Library, National Archives.



The cruiser "Seattle"

Administrative matters pertaining to the armed guards were handled by the Armed Guard Section of the Planning Division, which was under the direction of Comdr. William Pitt Scott,⁸⁰ who prepared and executed the plan for the use of armed guards.⁸¹ Besides Commander Scott, the

section comprised in June, 1917, Ralph Hornblower and five clerks, which remained the staff throughout the war.⁸² Orders for arming ships went out from the Armed Guard Section to navy yards on the Atlantic coast, where the work was performed. Most active in this work was the New York Navy Yard.⁸³

The reason for the adoption of the policy

⁸⁰ Lieut. Ralph Hornblower, "The Armed Guard Section" (1919), O. S. N., general files, no. 28749-71; Edward Breck, "Armed Guards on American Merchantmen in the World War" (1921), p. 16, MS among materials from Office of Naval Records and Library, National Archives.

⁸¹ Senate Committee on Naval Affairs, *Naval Investigation Hearings*, pp. 1275-9, 1335.

⁸² Hornblower worked as an unpaid volunteer worker until he was commissioned in the Naval Reserve Force in January, 1918.

⁸³ Navy Dept., Bureau of Ordnance, *Navy Ordnance Activities World War, 1917-1918* (Washington, 1920), pp. 38 ff.

of arming troop and cargo transports, which during the period of American neutrality had been a matter of political and diplomatic controversy, was to force the Germans to use their torpedoes to sink ships. The submarines themselves being very vulnerable to gun fire could not shoot it out with armed merchantmen. Torpedoes were expensive to manufacture, and only a few could be carried by a submarine. The practice of arming ships enabled the Germans to contend that their submarines must attack without warning or run the risk of destruction.

BOARD OF APPRAISAL

Preparations were made before the outbreak of war, upon plans formulated by the Director of Naval Districts, for the acquisition of ships for use as naval auxiliaries. The naval appropriation act of March 4, 1917, gave the department the power to commandeer vessels needed by the Navy. By order of the department of April 2, 1917, a Board of Appraisal for Merchant and Private Vessels was appointed under Capt. Alexander S. Halstead.⁸⁴ The headquarters of the board was at New York; sub-boards reported to it from other places. The function of the board was to appraise and set values upon vessels which the department considered acquiring by purchase or by charter, in order to safeguard

the interests of the government. The values set by the board were used by the department in negotiations with the owners.⁸⁵

The power of this board was augmented as a result of the passage of the act of Congress of June 15, 1917, which authorized the Navy Department to commandeer property subject to the payment of just compensation which was to be fixed by the President. By means of this act the Navy Department was enabled to meet the situation more adequately. Upon the suggestion of the Secretary of the Navy, the President appointed the members of the Board of Appraisal for Merchant and Private Vessels, or the Board of Appraisal as it was usually designated, as a Board to Determine Price or Just Compensation for Vessels Purchased or Taken Over.⁸⁶ Under this new authority the board had a quasi-judicial status and held hearings to determine the price to be paid for vessels. Evidence presented by interested parties was considered and further information was obtained from other sources, including information in the possession of outside parties and the opinions of disinterested experts. Upon the basis of this information the board arrived at the price or just compensation for the vessel. In reaching its decisions the board was guided by information on the following points:

(a) The opinions of experts regarded by the board as disinterested, as to the value of the property under consideration.

(b) The testimony of experts produced by the interested parties, as to the value of the property under consideration.

(c) The prices at which similar property of like character to that under consideration has been sold at or about the time the property under consideration was taken by the Navy

⁸⁴ F. D. Roosevelt to Capt. A. H. Halstead, Apr. 2, 1917, Board of Review files, "Procedure—Officers," National Archives; Navy Dept., *Annual Report*, 1918, p. 121; Anderson, p. 29; naval examining board record of Capt. A. S. Halstead. Captain Halstead was detached from the Naval War College on Apr. 4 and reported for duty as senior member of the board on Apr. 7. His fitness reports were signed by W. S. Benson or the Director of Naval Districts. The other members of the board were the following: Naval Constructor H. G. Gillmor, Lieut. Comdrs. E. C. Kalbfus, Stevenson Taylor, A. L. Swasey, Daniel Bacon, the last three being of the Naval Reserve Force.

⁸⁵ Navy Dept., *Annual Report*, 1918, p. 122.

⁸⁶ O. S. N., general files, no. 5194-1264.

Department and the conditions surrounding these transactions.

(d) The availability of the property for commercial use.

(e) The demand for property of like character for commercial purposes.

(f) The original cost of the property.

(g) The value of the property under normal conditions.

(h) The cost of the property to the owner up to the time the property was taken.

(i) The time when the property was acquired by the owner, the use which the property has been put by the owner, and the gross and net earnings of the property in the hands of the owner for a period of from three to five years before possession was taken by the Navy.

(j) The cost to reproduce the property taken and the time required for such reproduction.⁸⁷

Most owners accepted the awards of the board, whose work assured them fair prices and at the same time prevented excessive expenditure on the part of the United States Government. The number of vessels taken over included 320 by charter and 1,375 by purchase, the latter being acquired at appraised values set by the board totaling nearly \$29,000,000. Captain Halstead remained at the head of the two boards until October 29, 1918, when he was replaced by Capt. Robert L. Russell.

NAVAL OVERSEAS TRANSPORTATION SERVICE

The cargo carrying business of the Navy developed to enormous proportions during the war. At its beginning the department had 19 auxiliaries, consisting of transports, supply ships, colliers, and other vessels, which were operated by the Naval Auxiliary Service, an organization established under the Bureau of Navigation in 1905.⁸⁸

These vessels were officered and manned by civilians, but the act of Congress of August 29, 1916, provided for taking merchant seamen into the Naval Auxiliary Reserve, a branch of the Naval Reserve Force. Not long after the passage of this act, the organization of the reserve was undertaken in the Bureau of Navigation by Lieut. Comdr. Ralph A. Koch and Lieut. Robert T. Merrill, and in the beginning of 1917 enrollments in the Naval Auxiliary Reserve started. Lieutenant Merrill was ordered to New York on April 4, 1917, for duty as Supervisor Naval Auxiliary Reserve, a position which came to involve him in the management of ships.⁸⁹ A few days later Rear Admiral Hugo Osterhaus was called from retirement and ordered to Norfolk as Supervisor of Naval Auxiliaries.⁹⁰

The outbreak of the war brought about a change in the status of the auxiliaries and necessitated taking over other vessels. Early in May, 1917, the auxiliaries were commissioned as naval vessels, and their crews were enrolled in the Naval Reserve force as far as possible.⁹¹ The effect of this step was to transfer the former auxiliaries from the control of the Supervisor of Naval Auxiliaries to that of the Commander, Train, U. S. Atlantic Fleet, a post then filled by Rear Admiral William L. Rodgers.⁹² Since he was afloat and therefore not in a position actually to direct the vessels, Admiral Osterhaus continued

materials from Office of Naval Records and Library, National Archives; Robert T. Merrill, "The Genesis of the N. O. T. S." (1920), MS among materials from Office of Naval Records and Library, National Archives.

⁸⁹ Clephane, p. 10; naval examining board record of R. T. Merrill.

⁹⁰ Bureau of Naval Personnel, general file no. 1267 (Hugo Osterhaus).

⁹¹ Orders were issued to Admiral Osterhaus on April 27, and the change was effected on May 7.

⁹² Clephane, p. 10; Merrill, p. 2.

⁸⁷ Navy Dept., *Annual Report*, 1918, p. 123.

⁸⁸ W. S. Whitted, "The Old Auxiliary Service," U. S. Naval Inst., *Proc.*, LIV (July, 1928), 592; Lewis P. Clephane, "History of the Naval Overseas Transportation Service" (1920), p. 1, MS among ma-

to function at Norfolk, where the office of the Naval Auxiliary Service had been located because the contract for coal had been let there.

During most of 1917 the situation was this: the Supervisor of Naval Auxiliaries at Norfolk attempted to care for his former charges although he lacked proper authority; the Supervisor of the Naval Auxiliary Reserve at New York was becoming involved in taking over ships because there was nobody else to do the work; the Commander, Train, continued at sea; and at Washington both the Bureau of Navigation and the Office of the Chief of Naval Operations were giving some attention to the shipping question, but neither took adequate measures.

Certain changes in the administration of the supply ships which took place in 1917 led eventually to the institution of a proper organization. The Supervisor of Naval Auxiliaries was transferred on October 15 from Norfolk to the Bureau of Navigation, in Washington, Comdr. W. S. Whitted remaining at the former place as Assistant Supervisor of Naval Auxiliaries.⁹³ Lieutenant Merrill was designated as Assistant Supervisor of Naval Auxiliaries at New York on October 30.⁹⁴ Shortly afterwards, following an inspection visit by Admiral Rodgers at that place, both Whitted and Merrill were directed to report to the Commander, Train, U. S. Atlantic Fleet, for additional duty on his staff in connection with vessels of the train visiting Norfolk and New York.⁹⁵ They were to inspect the vessels and

to assist and advise their commanding officers.

Consideration was given in the Office of The Chief of Naval Operations at this time to the appointment of an officer to handle the auxiliaries, to the preparation of procedure for taking over merchant ships, and to the designation of assistant supervisors of naval auxiliaries at other ports.⁹⁶ In a memorandum addressed to the Chief of Naval Operations on December 4, 1917, Lieutenant Merrill pointed out that a large part of the control of the auxiliaries to the fleet had been exercised until recently by an officer on shore, the Supervisor of Naval Auxiliaries, but that the cargo vessels placed in operation during the war had the separate mission of carrying cargo to its destination and recommended that their command be under an officer stationed in Washington in the Office of the Chief of Naval Operations.⁹⁷ Other officers should be located at the major Atlantic coast ports of Boston, New York, Philadelphia, and Norfolk, on whose staffs should be a material officer, an administration officer, and a supply officer. Merrill's efforts were rewarded early in the next month when he proceeded to Washington with another memorandum prepared on the basis of his experience in New York in taking over merchant ships.

The necessity for the creation of a departmental organization to administer the cargo ships was augmented as a result of agreements with the War Department and the Shipping Board. During the fall of 1917, the Army found it increasingly difficult to obtain crews for its vessels and was obliged to call on the Navy at times to man them. An agreement was finally reached in December, 1917, by which the

⁹³ O. S. N., general files, no. 6203-157; Bureau of Naval Personnel, general file no. 1267 (Hugo Osterhaus); naval examining board record of W. S. Whitted.

⁹⁴ Bureau of Naval Personnel, general file no. 7318-53 (R. T. Merrill).

⁹⁵ *Ibid.*, no. 7318-55; naval examining board records of R. T. Merrill and W. S. Whitted.

⁹⁶ Merrill, p. —

⁹⁷ *Ibid.*, appendix

Navy was to man, maintain, and operate all troopships, animal transports, and cargo transports obtained by the War Department on bare ship charter from the Shipping Board.⁹⁸ In the following month an accord was reached with the Shipping Board whereby vessels operated by it in the war zone were to be manned by the Navy. This was a consummation which the Navy Department had been urging for months as a means of protecting convoys from the carelessness and treachery of civilian crews. Although both the War Department and the Shipping Board continued to operate some ships in the war zone, these agreements placed the bulk of American trans-Atlantic shipping under naval control.

After a conference with Comdr. Charles Belknap, Jr., who was then in charge of naval cargo ships in the Office of the Chief of Naval Operations, Lieutenant Merrill was directed to prepare an order for the establishment of a branch in that office to manage the ships. The result was the order of January 9, 1918, signed by Admiral Benson, which created the Naval Overseas Transportation Service, placing seventy-four vessels in its charge. The organization prescribed included a director in the Operating Division of the Office of the Chief of Naval Operations and a material officer in the Material Division of that office. The former position was held by Commander Belknap throughout the war, while a succession of officers handled the Material Section until July 15, 1918, when Comdr. A. S. Bryan took charge. The Naval Overseas Transportation Service organization in Washington eventually included the fol-

lowing branches: Assistant to Director, Troop Transports, Ocean Convoys, Coastwise Routing, Material, Operations—Navy Account Vessels, Operations—Army and Shipping Board Account Vessels, Statistics, and a General Inspector.⁹⁹ The function of the General Inspector was to study and analyze the operations of the service for the purpose of increasing its efficiency. The post was filled by the appointment of Lieut. Wilfrid V. N. Powelson on March 20, 1918, and it was located in New York until January 1, 1919, when it was moved to Washington.

Outside of Washington, the Naval Overseas Transportation Service was represented by district supervisors operating under the commandants of the First, Third, Fourth, and Fifth Naval Districts located at Boston, New York, Philadelphia, and Norfolk, respectively. The district organizations comprised, according to the recommendation of Lieutenant Merrill who based it upon merchant shipping practice, administration, material, and supply departments. All of the district supervisors were appointed in January, 1918, Merrill in New York, Whitted in Norfolk, Capt. Y. S. Williams in Boston, and Capt. G. B. Landenberger in Philadelphia. Other districts were subsequently established at Baltimore and Charleston.

During 1918 the Naval Overseas Transportation Service built up the largest fleet of cargo carriers the world had even known, 227 merchant vessels, 94 new Emergency Fleet Corporation vessels, and 101 Dutch merchant ships being added.¹⁰⁰ The service comprised 490 vessels on December 10, 1918, aggregating 5,800,000 tons.¹⁰¹ Of

⁹⁸ Benedict Crowell and Robert F. Wilson, *The Road to France: The Transportation of Troops and Military Supplies, 1917-1918* (New Haven, 1921); II, 446-7; O. S. N., general files, no. 28694-188.

⁹⁹ Clephane, p. 14.

¹⁰⁰ Navy Dept., *Annual Report*, 1918, p. 20.

¹⁰¹ Annual report, Chief of Naval Operations, Oct. 20, 1919, O. S. N., general files, no. 5087-185.

these 378 ships of approximately 2,000,000 tons were in actual operation, while the remainder were under construction or being prepared for commissioning. Those in operation included 226 on Army account, 87 on Navy account, and 65 on Shipping Board account. The bulk of the supplies which reached our fighting forces in Europe was transported by these vessels.

The convoy system under which the Naval Overseas Transportation Service vessels sailed was operated by the British navy with American assistance. At the time the United States entered the war, the British Admiralty was directing a shipping control system which was designed to protect the vessels and to employ them for war purposes. When intensified submarine warfare forced the adoption of the convoy system in the summer of 1917, its direction was logically placed in British hands. The principal British convoy officer was stationed at New York and under him were representatives at Atlantic coast ports, who before the war had functioned as naval vice consuls. For almost a year the Office of the Chief of Naval Operations limited its connection with the direction of the convoy system to approving plans made by the British Admiralty. United States warships were ordered on escort duty with convoys. Upon the establishment of the Convoy Office in the office of the Director of the Naval Overseas Transportation Service on March 1, 1918, a more active part was taken by the United States Navy in the operation of the convoys. Branch convoy offices were opened at New York and Hampton Roads; that at the former place was the senior office and was commanded by Rear Admiral Marbury Johnston, who was closely associated with



D. W. TODD

the British convoy officer. These offices handled matters connected with the formation of convoys and the instruction of their officers, after receiving information from Washington in regard to the entrance of ships into the convoys. The experience thus acquired placed the Navy in a position in September, 1918, to take over the operation of the "HB" ("Homeward Bound" to Europe) convoys running from New York to French ports on the Bay of Biscay.¹⁰² The convoys following more northern routes, which were more exposed to sub-

¹⁰² Clephane, pp. 3, 97; R. S. Crenshaw, "Report of Activities of Convoys and Routing Office N. O. T. S." (n. d.), MS among materials from Office of Naval Records and Library, National Archives.

marine attack, remained under British control. Had the war continued longer, other convoys would have come under the jurisdiction of the United States Navy.

Preparations were made, beginning early in 1918, for conveying coastwise shipping. A plan was communicated to the commandants of the naval districts on the Atlantic coast in March, according to which they were to control this shipping when the need should arise.¹⁰³ In order to cover operations off the coast and mark out the jurisdiction of the districts, their limits were extended to sea. Instructions were communicated to ship owners and masters concerning the procedure to be followed, if it became necessary for the Navy to assume control of shipping. Thus when submarine attacks began off the Atlantic coast, the Chief of Naval Operations ordered in June, 1918, that the previously communicated instructions be put into effect, and a Coastwise Routing Office was activated under the Director of the Naval Overseas Transportation Service.¹⁰⁴ Routing offices were established by the district commandants in the principal Atlantic ports, and others were located in West Indies ports and at Halifax and a station ship was maintained at Tampico, Mexico. The routes prescribed were close to the coast where shallow water made it difficult for the submarines to operate except on the surface.

CRUISER AND TRANSPORT FORCE

Although not known by the designation, Cruiser and Transport Force, until some months later, this organization originated in May, 1917. On the 23rd of that month,

Rear Admiral Albert Gleaves, who for a year and a half had been in command of the Destroyer Force, U. S. Atlantic Fleet, was ordered to Washington and given directions to form the first convoy of troop transports to sail for Europe. After being designated on May 29 as Commander of U. S. Convoy Operations in the Atlantic, he proceeded to New York to arrange the convoy.¹⁰⁵ The first convoy of three cruisers and twelve transports left New York on June 14, the first group escorted by the U. S. S. *Seattle*, on board of which was Admiral Gleaves, reaching St. Nazaire, France, on June 25. For months thereafter transports were convoyed at only infrequent intervals, for neither transports nor troops were available.

The efforts of the government had first to be directed towards acquiring transports, for at the outbreak of the war the Navy had only two and the Army had none suitable for trans-Atlantic service. A decision also had to be made as to whether the Army or the Navy would control the transports. The first convoys comprised troopships operated by civilian captains responsible to the Army. Merchant ships were taken over and converted into military transports, but the most important group of vessels obtained for this purpose was some of the large ex-German liners, which had been interned in United States ports and which had been seized upon the declaration of war. As these vessels had been damaged by their German crews, it was not until September, 1917, that they began to be available for use as transports after repairs

¹⁰³ *Ibid.*, p. 73.

¹⁰⁴ *Ibid.*, p. 74.

¹⁰⁵ Albert Gleaves, *A History of the Transport Service: Adventures and Experiences of United States Transports and Cruisers in the World War* (New York, 1921), p. 32; Bureau of Naval Personnel, general file no. 2808 (Albert Gleaves).

had been made. A joint letter of the Secretary of War and the Secretary of the Navy approved by the President on July 12, 1917, directed that sixteen of the largest of the German vessels be commissioned in the Navy for transporting troops and munitions.¹⁰⁶ By an executive order of August 29, 1917, these ships were transferred from the Shipping Board to the Navy. Towards the end of July, 1917, Admiral Gleaves returned to the United States and during conferences at the Navy Department urged complete naval operation of the transports. The ability of the Navy to provide trained crews susceptible of discipline and officers capable of maneuvering ships in convoys influenced the Army to agree that the Navy should not only organize and escort the troop convoys but that it should also furnish officers and enlisted crews for the troopships.¹⁰⁷ According to the policy worked out by the two departments, the Army loaded troops and cargo at the ports of embarkation and discharged them at the ports of debarkation in France, while the Navy had charge afloat—routing, escorting, convoying, manning, operating, repairing, coaling, and provisioning. Some fifteen foreign vessels chartered for use as troopships became attached to the Cruiser and Transport Force, which ultimately comprised forty-eight troop carriers.¹⁰⁸

The routing of the troop convoys was handled by the Office of the Chief of Naval Operations. The convoy commander went



LIEUTENANT JOHN N. TOWERS

to Washington and with the Assistant Chief of Naval Operations, Capt. William V. Pratt, studied data pertaining to the convoys and selected the route to be followed. Orders for the convoy were signed by Admiral Benson, and data concerning it were sent to Admiral Sims in order that arrangements could be made abroad for the reception of the convoys.

The headquarters of the Cruiser Force, U. S. Atlantic Fleet, of which Admiral Gleaves was designated commander on July 16, 1917, was on his flagship at the foot of 97th Street, in the North River, New York. He was also designated as the Commander of the Transport Force, U. S. Atlantic Fleet, on August 3. The two forces later became known as the Cruiser and Transport Force. From his New York office,

¹⁰⁶ O. S. N., general files, nos. 28785-5, 28785-16, 28785-26.

¹⁰⁷ War Dept., *Annual Report*, 1919, vol. I, pt. 4, p. 4894; Crowell, pp. 409, 446.

¹⁰⁸ Lists of the ships attached to the force are to be found in the books by Gleaves and Crowell.

Admiral Gleaves made occasional trips to Washington to confer with the Chief of Naval Operations and other officials of the department. Although the Cruiser and Transport Force was attached to the Atlantic Fleet, the relations of its commander were closer with the Chief of Naval Operations than with the commander-in-chief of that fleet, who was generally somewhere at sea. In effect Admiral Gleaves's office was a branch of the Office of the Chief of Naval Operations. One of the commander's earliest duties was seeing to the recon-ditioning of the former German liners. As cruisers and transports were assigned to the force, their commanding officers reported to Admiral Gleaves for orders. Conferences with these officers were frequent thereafter, for the Admiral had to keep in close touch with operations at sea. He exchanged visits with the captains of Allied naval vessels visiting New York. He inspected vessels and directed investigations of sinkings and accidents.¹⁰⁹ He supervised the activities of the headquarters staff, which came to include the following officers: chief of staff, force transport officer, personnel officer, engineer officer, gunnery officer, repair officer, medical officer, radio officer, flag secretary and aid, and aids. These officers inspected vessels, arranged improvements and repairs, prepared instructions and regulations for the conduct of the vessels, and in other ways attempted to assist their commanding officers.

The headquarters of the Cruiser and Transport Force was located at New York because the chief army port of embarkation



ALBERT GLEAVES (AS A VICE ADMIRAL)

was at Hoboken, New Jersey. Lieut. Charles N. Ingraham was detailed in August, 1917 to serve as naval liaison officer at Hoboken. This duty was assumed in February, 1918, by Capt. Ashley H. Robertson in an office on the Army docks close to the headquarters of the commanding general of the port. He acted as Admiral Gleaves's representative in connection with repairs, fitting out transports for sea, and maintaining close liaison with the Army. This arrangement was apparently not entirely satisfactory, for on June 15, 1918, Admiral Gleaves moved his own office from New York to the Steneck Building in Hoboken. By this time the operations of the Army and the Navy in connection with the transportation of troops had been greatly expanded, necessitating close cooperation between the two services.

¹⁰⁹ Cruiser and Transport Force, war diary, *passim*, MS among materials from Office of Naval Records and Library, National Archives.

The inauguration of troopship sailings from Newport News, Virginia, on March 30, 1918, marked the establishment there on that date of the Newport News Division, Cruiser and Transport Force.¹¹⁰ This was created by direction of the Chief of Naval Operations under the command of Rear Admiral Hilary P. Jones, who had been attached to the force since July, 1917. His office was in a building at the head of the army piers. The lack of piers at this place made it necessary to form a pool of all harbor floating equipment, such as tugs, lighters, barges, etc., on August 15, 1918, under the control of Admiral Jones as Administrator of Harbor Floating Equipment in Hampton Roads. The division commander developed a staff, which included a chief of staff who was the executive head of all departments of both the transport organization and the harbor floating equipment organization; a flag secretary who was assistant chief of staff, division gunnery officer, personnel officer, and liaison officer; a flag lieutenant; a division engineer officer; a division surgeon, and a division supply officer. Twelve United States and thirteen Allied transports were assigned to the division.

At the time of the Armistice, the Cruiser and Transport Force consisted of twenty-four cruisers and forty-two transports manned by about 3,000 officers and 42,000 men. Nearly a million troops were conveyed to France on ships operated by the Navy. No transport was lost on the voy-

age to Europe, but several were sunk on return trips. The cruisers escorted the transports to a rendezvous in the eastern Atlantic whence they were taken to ports on the Bay of Biscay by destroyers based at Queenstown or Brest. On the return voyage the empty transports were escorted out to sea for two or three days and then allowed to proceed on their own.

The transport fleet was greatly expanded after the cessation of hostilities in order to bring the troops home as quickly as possible, for the more speedily this could be done and the troops discharged the greater would be the financial saving for the government. Additions to the fleet included fifty-six cargo vessels converted for the purpose, a number of German vessels allocated by the Peace Conference, fourteen battle-ships, ten cruisers, and a number of mine planters. The troop carrying capacity of the individual ships was also increased as much as possible. The movement of troops across the Atlantic began in November, 1918, and continued until the summer of 1919. The only ports of debarkation were New York and Newport News until April, 1919, when the District Supervisors, Naval Overseas Transportation Service, of the First, Fourth, and Sixth Naval Districts at Boston, Philadelphia, and Charleston, respectively, were designated as representatives of the Cruiser and Transport Force for the debarkation of troops.

The demobilization of the Cruiser and Transport Force began in July, 1919, the vessels being returned to their owners, the Army Transport Service, or the Shipping Board under the supervision of the Joint Board of Review. The German vessels were reconditioned for transfer to the Inter Allied Mercantile Council. Admiral Gleaves

¹¹⁰ Albert Gleaves, Annual report of Commander Cruiser and Transport Force, July 19, 1918, among materials from Office of Naval Records and Library, National Archives; Cruiser and Transport Force, Newport News Division, war diary, MS among materials from Office of Naval Records and Library, National Archives.



The transport "George Washington"

was detached upon being designated as commander-in-chief of the Asiatic Fleet on September 1, and was succeeded by Capt. Casey B. Morgan, who shortly afterwards recommended the complete demobilization of the force, which by that time was reduced to five transports. Pursuant to directions from the Chief of Naval Operations, the Newport News Division was

closed on October 18,¹¹¹ and the force itself was demobilized on the 31st, custody of the Steneck Building at Hoboken being transferred to a representative of the Commandant, Third Naval District.¹¹²

(To be continued)

¹¹¹ O. S. N., general files, no. 28963-763:1.

¹¹² *Ibid.*

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Headquarters Gazette

THE WAR DEPARTMENT HISTORICAL PROGRAM

BY THURMAN S. WILKINS

**BRIGADIER GENERAL MALONY SUCCEEDS
MAJOR GENERAL HARDING AS CHIEF,
HISTORICAL DIVISION, WAR DEPARTMENT
SPECIAL STAFF**

Brigadier General Harry J. Malony, who recently served in Greece as the War Department representative with the Grady Mission, has succeeded Major General E. F. Harding in his dual post as Chief of the Historical Division, War Department Special Staff, and of the Historical Section of the Office of Joint and Combined Chiefs of Staff. It is understood that the new Chief Historian, Dr. Kent Roberts Greenfield, highly impressed with General Malony's accomplishments at GHQ, U. S. Army, when war began, had been interested in encouraging the appointment of General Malony to his new position.

General Malony and General Harding had both served as divisional commanders during the war.

General Malony assumed command of the 94th Infantry Division prior to its activation in September, 1943, after serving since February, 1942, with the Munitions Assignment Board. In September, 1944, he led the 94th into action in the Lorient and St. Nazaire sectors with the object of containing some 60,000 German troops there in their well-protected submarine ports. His division effectively pinned the two pockets up in 111



BRIGADIER GENERAL HARRY J. MALONY

days of combat and then, on New Year's Day, 1945, plunged into the Siegfried switch line of the Saar-Moselle triangle for some of the fiercest fighting on the western front. By Washington's Birthday General Malony's troops had thrown bridgeheads across the Saar, breaching the main Siegfried line. Three weeks later his division spearheaded the drive of the Third and Seventh Armies to the Rhine, crossing the river between Lud-

wigshaven and Worms. For "inspiring leadership and tactical skill" in those operations General Malony received an oak leaf cluster to the Distinguished Service Medal awarded to him in World War I. Upon the German surrender he relinquished command of the 94th, to serve as Director of the London Munitions Board until his assignment to the Grady Mission.

General Harding assumed command of the 32nd Infantry Division, at Camp Livingston, Louisiana, a few weeks after the Pearl Harbor attack, and led it in the victorious Buna-Sanananda operation, receiving a decoration for gallantry in action near Haroki, New Guinea. The account of the Buna-Sanananda operation is told in the second volume of the *AMERICAN FORCES IN ACTION SERIES: The Papuan Campaign*, which remarks (page 2):

The story is set in a background of fever-ridden swamp and jungle, where American soldiers lay day after day in waterlogged fox holes or crawled through murderous fire toward enemy positions they could not see. Despite all the difficulties imposed by terrain, climate, and the formidable strength of Japanese fortifications, despite failure in many heroic attacks, the effort was carried through to a final and smashing success. This campaign and the almost simultaneous action on Guadalcanal were the first victorious operations of US Ground Forces against the Japanese.

Another popular account of the action can be read in *G. I. Jungle*, by Warrant Officer E. J. Kahn, Jr.,¹ who dedicated the volume to General Harding. In March, 1943, General Harding assumed command of the Mobile Force, Caribbean Defense Command, with headquarters at Quarry Heights, Canal Zone. In June, 1945, he was assigned as senior army member to the Joint Postwar Committee of the Joint Chiefs of Staff, serv-



MAJOR GENERAL E. F. HARDING

ing in that capacity until his selection to direct the expanded War Department historical program last October. He is current President of the Infantry Association, and for several years before the war was editor of the *Infantry Journal*.

THE HISTORICAL DIVISION, WAR DEPARTMENT SPECIAL STAFF

Colonel Allan F. Clark, Jr., and Colonel John M. Kemper, both former Chiefs of Historical Branch, G-2, remain as Deputy Chief of the Historical Division and Chief of the Planning Branch thereof, respectively. A number of changes in the personnel of the division, especially among the military, have occurred during the period of demobilization. At the present time Lieutenant Colonel Thomas J. Badger and Major James D. T. Hamilton are working with Colonel Kemper in the Planning Branch. Major Maynard G.

¹Well-known for his contributions to the New Yorker, E. J. Kahn, Jr., served with the 9th Infantry Division during its training period (described in his book *The Army Life*) at which time General Harding was also assigned to that division.

Moyer, Membership Secretary of the American Military Institute, has been released for duty at Yale University. Historians assigned to European projects include Dr. Hugh M. Cole, Gordon A. Harrison, Dr. Forrest C. Pogue, Jr., Dr. Roland G. Ruppenthal, and Howard W. Smyth. Those assigned to Pacific projects include Dr. Louis Morton, Charles B. Hirschfeld, Edmond G. Love, Riley Sunderland, and Lt. Charles F. Romanus. Dr. Thomas H. V. Motter is concerned with the Middle East. Dr. Troyer S. Anderson is working upon top level War Department history. Wsevolod Aylaimoff is in charge of cartographic work. Frederick P. Todd, Captain Ulysses G. Lee, Jr., Major Mattie E. Treadwell, and Dr. Boyd C. Shafer are all assigned to special projects. Dr. James T. Bunyan is responsible for the review of incoming preliminary narratives forwarded to the Historical Division from historians in all quarters of the military establishment. To date over seven hundred such manuscripts have been received or produced by the divi-

sion and are currently held in the custody of the Records Analysis Section, under the charge of Israel Wice.

"AMERICAN FORCES IN ACTION SERIES":

NEW TITLES TO BE PUBLISHED

Dr. Rudolph A. Winnacker is in charge of editorial activities in the division, the publication program of which is gaining momentum. Three additional monographs in the "American Forces in Action Series" have been edited for publication in September and October. A fourth volume, *Small Unit Actions*, is scheduled to appear slightly later in the year. Studies on the operations at St. Lô, Anzio, and Kwajalein are planned for publication in the early part of 1947. Other pamphlets in the series, with publication dates not yet determined, will cover American action in New Georgia, Normandy (Utah Beach to Cherbourg), Sicily, the Ardennes, Guadalcanal, Bougainville, Leyte, Okinawa, Saipan, southern France, and Attu.

★ ★ ★ ★ ★ ★ ★ ★

Notes And Antiquities

OLDER BOOKS ABOUT THE ARMY

(Contributed by a Member of the Institute)

The flood of personal narratives of the Civil War has not ceased. To the immense number devoted to army life on both sides new volumes are added each year. John William De Forrest's *A Volunteer's Adventures* is the most recent and one of the more welcome additions. Among the flood is one book which I have always loved and often used: John D. Billings' *Hardtack and Coffee or the Unwritten Story of Army Life* . . . (Boston, 1888). It is one of the few that really gets down to the details of soldier life and stays there. There is hardly a phase omitted. The author has magnificent chapters on recruits and recruiting, life in tents and huts, malingerers, rations, punishments, army mules—and about as much in proportion on fighting as the soldier usually saw of it. There is a full treatment of army corps badges and other insignia.

The only book I know which can compare with *Hardtack and Coffee* is Carlton McCarthy's *Detailed Minutiae of Soldier Life in the Army of Northern Virginia, 1861-1865* (Richmond, 1882). It is, of course, written from the other side of the skirmish line, but the touch is much the same. Both are delightful reading; to some extent this is due to their common weakness. Both were written by educated, cultured men serving in high grade units—McCarthy was in the Richmond Howitzers—and thus some of the seamy side has been minimized.

Books on Civil War army life of this sort inevitably bring to mind Bell Irvin Wiley's recent *The Life of Johnny Reb* (Indianapolis and New York: The Bobbs-Merrill Co., 1943). Wiley's is a valuable tool for the military historian; it represents a thousand points of view to one apiece for Billings and McCarthy. Doubtless it gives a far more accurate picture of the Civil War soldier. Yet lacking is the ring of authenticity and freshness to be found in the others. In spite of quite facile writing Wiley's book seems encyclopedic and somewhat dull, a complaint not uncommonly made of other such serious historical studies.

Without attempting to say that this is a solution of the problem I would like to point out that much of the charm of *Hardtack and Coffee* lies in the hundreds of delightful sketches by another veteran, Charles W. Reed, which dot its pages. *Detailed Minutiae* is also illustrated (by William L. Sheppard, who served with McCarthy in the Howitzers), although the drawings are fewer and more austere. Wiley's volume, on the other hand, has perhaps a dozen pictures, largely photographs of the period. Even these are not well identified and at least one is painfully mislabelled. A photograph (opposite page 189) entitled "Group of Confederates about the Time of Bull Run" is really of members of New York's Seventh Regiment of the period.

The time may come when such books as Wiley's will be illustrated in the same vein as they are written: comprehensively, vividly and critically. To all interested in the project I recommend a glance at the illustrations in Jo Mora's *Trail Dust and Saddle Leather* (New York: Charles Scribner's Sons, 1946). To be sure, Mora's is a personal narrative and not an historical study. But much he describes and sketched occurred before his day. What is important is that his drawings tell just as much as his text and, at times, more effectively. There is room for similarly illustrated books on army life, only let us hope they are done by men who know their business.

* * * *

The War Department has just announced its plan, which will go into effect on February 1, 1947, for selecting officer candidates from the ranks of the Army. This is the first practical method ever devised for offering Regular Army enlisted men an opportunity for commission in peacetime. It has been possible in the past to win an appointment to the Military Academy, but so limited were these appointments that few soldiers secured commissions this way. Now the plan is to establish two Officer Candidate Schools and open enrollment throughout the Army on a competitive basis. Successful graduates receive temporary commissions, which after a probationary period of years can be translated into Regular commissions.

A hundred years ago an anonymous ex-Regular voiced complaint of the condition which has just now been corrected. His book is one of the very limited number written about the Army of that period. It is: "An American Soldier," *Recollections of the United States Army... A Series of Thrilling Tales and Sketches by an American Soldier. Written During a Period in "the Service"*

since 1830 (Boston: James Munroe and Company, 1845.)

The little volume presents fourteen fictionalized "experiences" of Regular Army officers and enlisted men of the 1830's and 1840's. Despite the dramatic twists and the starched style of the times, the stories unfold a realistic picture of frontier service: the harsh discipline, the hard life, the immense gap between officers and men—these last, predominantly foreigners of the commonest sort. In his introduction the author lays much of the blame for the low quality of the American soldier on his lack of opportunity to qualify for a commission. "It has rendered the army very unpopular and odious with the great mass of people. Young men of character and enterprise rarely enlist, because they well know, that on a peace establishment, no higher rank than a *Sergeantry* can be obtained; nor have the government been able, during the last twelve years, to obtain a sufficient number of *American citizens* to complete the necessary complement of men for the rank and the file of our little army." F.P.T.

QUERIES

USE OF RED SCARFS IN THE ARMORED FORCES: I wish to verify the story that it was a custom with some armored units in the European Theater in the Second World War to permit men who managed to escape from burning tanks to wear a red scarf made of a German flag. Was this the only feat to be rewarded in this fashion?

R.W.

LAUNDRESSES IN THE ARMY: The allowance of two laundresses per company to accompany United States troops was revoked by Congress in 1878 (20 Stat. 150). What was the background of this practice?

D.F.

The Military Library

THE QUARTERMASTER CORPS HISTORICAL STUDIES

BY SAMUEL B. MARLEY*

Discussion of the first eleven monographs in the Quartermaster Corps Historical Studies series is appropriate at this time because they have recently become available for more general use. Although the first of these studies was issued in March, 1943, and others appeared periodically thereafter, they contained information which, if disclosed during the war, would have been of value to enemy nations; therefore, in the interest of national security, their use was restricted to government officials and their distribution limited to branches of the War Department and other interested government agencies and, infrequently, to a few libraries.

Now that the war has ended, the need for secrecy no longer exists. Consequently, the War Department, like several other government agencies, is making available to research libraries through Library of Congress distribution, selected publications bearing on various phases of the war. The Quartermaster Corps Historical Studies are among the selected publications to be made available through this channel.

The plan for writing historical studies of wartime activities developed within the War Department early in the defense program. As a part of the overall program, the Commanding General of the Services of Supply, in the first half of 1942, ordered each service to set up a historical section to compile a history of

its activities. Thus, the Quartermaster General created within his office a Historical Section for the purpose of producing eventually "a comprehensive and finished history in one or more volumes, of the Quartermaster Corps during the emergency."

Since the Historical Section was itself a product of the emergency organization and the duration of its existence indeterminable, concentration upon an ideal end-product was thought unwise; therefore, it was decided to prepare preliminary studies which would be published as rapidly as possible. Consequently, the section compiled a list of thirty topics for studies which, when completed, would provide a foundation on which to base a more pretentious account providing the means of continuing the work should be forthcoming.

The Quartermaster Corps Historical Studies which have been released at this time, as is to be expected with a program such as the Historical Section was following, run the gamut from general accounts of the development of broad policies to the detailed study of the handling of specific problems in quartermaster procurement.

The first monograph, *Procurement Planning in the Quartermaster Corps, 1920-1940* (Processed. Washington, March 1943. Pp. 128.), by Thomas M. Pitkin and Herbert R. Rifkind, traces the development of procurement planning as a phase of the evolution of the Industrial Mobilization Plan. Beginning with a discussion of the origin of the planning idea and the organization of the War

*Mr. Marley is a member of the staff of the Historical Records Section, Civilian Production Administration, and has been one of the editors of the published minutes of various predecessor agencies of the Civilian Production Administration.

Department for planning, the authors describe the organization of the Office of the Quartermaster General in Washington and in the field with particular reference to the difficulties in establishing satisfactory procurement districts. Surveys and special studies, the development of educational orders, the use of planning information in current procurement, and other activities which resulted in the assembly of data on which to base plans are discussed. Finally, some attention is devoted to the use made during the 1939-1940 period of limited national emergency of plans and data developed during the planning period.

In *The Small Business Man and Quartermaster Contracts, 1940-1942* (Processed. Washington, April 1943. Pp. 84 and appendices.), by Harry B. Yoshpe, is shown one phase of the struggle to save from extinction that segment of the national economy that has been called its backbone. Under the competitive bidding contracts by which quartermaster items were procured the small producer was seldom able to bid successfully against larger producers. During times of peace there was little concern about such an uneven spread of contracts. But as the emergency increasingly affected the economy by causing acute shortages of materials and labor and consequent curtailment of civilian production, small business men, certain geographic areas, and some entire industries found themselves facing financial difficulties. As a result there was an outcry; Congressional committees considered the problems involved and the production-directing agencies of the government tried several plans. Legislation was passed permitting negotiated contracts. The Office of the Quartermaster General, reluctant to abandon its accustomed method, attempted splitting awards. Finally, heeding the pressure applied by the Advisory Commission to the Council of National Defense and its successors, the Office of Production

Management and the War Production Board, the Quartermaster General created a Contract Distribution Division and tried with none too great success various plans of spreading contracts, such as subcontracting, negotiated contracts with industries in certain distress areas, giving wide publicity to types of items needed, and directing would-be contractors in getting financial aid.

Quartermaster Corps relations with the small business man comprise only one phase of the impact of war on this segment of the economy and the period covered by this monograph is only the period of beginnings. As an account of this phase, it is an excellent study. It might have been more well-rounded, however, had some attention been given to information available in publications of the War Production Board and its predecessors, the Office of Production Management and the Advisory Commission to the Council of National Defense. For instance, one might infer from the statement on page 24 that the organization for aiding in contract distribution and subcontracting originated with the Defense Contract Service of the Office of Production Management in early 1941 when actually the Defense Contract Service was a reorganization of the Office of Small Business Activities which had been created on October 15, 1940, and which operated under the direction of the Coordinator of National Defense Purchases of the Advisory Commission to the Council of National Defense.

The Development of the Quartermaster Replacement Training Centers (Processed. Washington, May 1943. Pp. 58.), by Joseph J. Mathews, may best be summarized by the following excerpt from its preface:

The present study pretends to be nothing more than a survey of the development of the replacement training program in the Quartermaster Corps to the end of the year 1942. Emphasis has been placed on the program as a whole rather than on the histories of the individual training centers.

The origins and subsequent development of the replacement training program, the factors which produced this "basic departure" in the Army training scheme, the relationship of replacement training to other phases of Army training, and the peculiar problems and contributions of the Quartermaster replacement training centers have been the most emphasized points in the monograph.

Planning for Industrial Mobilization, 1920-1940 (Processed. Washington, August 1943. Pp. 304.), by Harold W. Thatcher, was designed to provide some of the background against which to write the projected history of the activities of the Quartermaster Corps in the war, as well as to fulfill, in part at least, a recognized need for a detailed study of the Industrial Mobilization Plan and its evolution. After discussing the realization of the need for planning as a result of the unfortunate experiences of the first World War, the feeble beginnings immediately upon passage of the National Defense Act of 1920, the evolution and crystallization of the planning agencies, and nine years of gathering data, the author gives an account of the first complete plan, the "Plan for Governmental Organization for War" or "The Hurley Plan," in 1929, the War Policies Commission and its consideration of the 1930-1931 plan, and the revisions of 1933, 1936, and 1939.

This is a well-rounded study of an important phase of our peacetime planning and serves to fill a lamentable gap in our knowledge of our preparations for defense. Having access to official sources, the author could answer definitely questions which could only be guessed at by outsiders who attempted to write on the subjects.

The fifth monograph, *Quartermaster Equipment for Special Forces* (Processed. Washington, February 1944. Pp. 326.), by Thomas M. Pitkin, is an interesting account of the problems involved in, and the experiments necessary for, the development of equipment and supplies for use under the

varied conditions of a global conflict. Never before had the United States Army been forced to plan major campaigns in tropical jungles, arctic wastes, mountainous and desert terrain, and the many variations and combinations of these. Since all previous planning had been based upon a defensive concept and operations had been visualized as taking place mainly near or within the continental United States or similar climatic areas, little attention had been devoted to developing and producing specialized equipment on the scale to be needed. True, we had fought in the Philippines and kept a garrison there as well as in Panama and Alaska, but any special equipment was adapted from native usage or consisted of standard equipment slightly modified to meet the specific conditions. Therefore, it was necessary to develop the equipment from nothing and that quickly.

Paralleling the development of specialized equipment was the development of special rations, a subject considered in *The Development of Special Rations for the Army* (Washington: Government Printing Office, 1944. Pp. 132.), by Harold W. Thatcher. Mobile warfare, the recognition of the inadequacy of emergency rations used in the first World War, and the need of rations for use under unusual conditions of global war resulted in intense study of the problem of providing suitable foods. The details of the preliminary experimentation and testing, adoption and standardization, manufacturing and procurement, and distribution and use of such rations as the Type D Emergency Ration, Type C Field Ration, Type K Field Ration, the Mountain Ration, the Five-in-One Ration, the Jungle Ration, the Ten-in-One Ration, and other more specialized rations are discussed fully. A delay in publication enabled the author to add a chapter on more recent developments bringing the study up to the end of 1943.

Complementary to the study of the development of special rations is *The Development of Meat, Dairy, Poultry, and Fish Products* (Washington: Government Printing Office, 1944. Pp. 54.), by Elliott Cassidy. This study deals with the development of methods for processing, preserving, packing, shipping, and storing the meat products and related foods which form the basic item in the diet of the American public and consequently of the American army.

Production Control in the Quartermaster Corps, 1939-1944 (Washington: Government Printing Office, 1944. Pp. 101.), by Harry B. Yoshpe, is an account of the effort to arrive at a solution of the problems involved in supplying the needs of one of the many competing armed services and civilian supporting agencies which were in conflict over a rapidly dwindling supply of materials, facilities, and labor. Among the elements of the problem were controlling the flow of materials, planning and scheduling production, expanding plants, arranging financial aid to contractors, supervising prices, and developing techniques of inspection for items of procurement. The study is based wholly on records available in the Office of the Quartermaster General and forms a comprehensive historical record of quartermaster experience in an important field of war activity. It is to be hoped that all agencies concerned with other aspects of production control during the war will contribute similar monographs which may give a complete history of wartime production control.

Today's mobile warfare makes essential an adequate supply of petroleum products to armies in the field. Mobility of armies has always been fundamental in military strategy and tactics, but present-day equipment makes possible greater freedom of movement than ever before. Since such freedom depends upon the ability of an army's trucks, tanks,

jeeps, and tractors to keep moving, maintenance of a steady flow of the necessary petroleum products is vital. Formation of the organization to direct, and completion of, arrangements for developing, purchasing, and distributing petroleum and petroleum products is the subject of the ninth monograph in this series, *Fuels for Global Conflict* (Washington: Government Printing Office, 1945. Pp. 99.), by Erna Risch. It covers the period from the outbreak of the European War in 1939 to June, 1944. Included is a final chapter on the procurement of coal for army use, which is in reality a complete and separate study.

Directly related to the sixth and seventh monographs of the series concerning the development of rations for the Army is the tenth, *The Packaging and Packing of Subsistence for the Army* (Washington: Government Printing Office, 1945. Pp. 142.), by Harold W. Thatcher. The problems presented by the necessity to get food to the fighting fronts in edible condition was a major one. The difficulty of developing adequate containers to withstand the unusual conditions of war and war shipping and the need for packing foods not packed for shipment and storage under normal conditions led to extensive study and experimentation. In order to complete the task satisfactorily it was necessary to develop an extensive organization of specialists and to devise numerous innovations.

As demands on the manpower of the nation caused critical shortages and because the Quartermaster Corps is concerned with the procurement of civilian type articles for military use—articles which had low material and labor priority ratings, the problem of labor supply became acute. The eleventh study in the series, *Labor Problems in Quartermaster Procurement, 1939-1944* (Washington: Government Printing Office, 1945. Pp.

106.), by Harry B. Yoshpe, is an account of this problem and the efforts to solve it.

It will be noted that the first five monographs are multilithed and the last six printed. Interestingly enough, these are the only historical studies produced by one of the technical services which were published, the remainder having been prepared in typescript. Publication was apparently not originally contemplated for studies produced under the historical program of the Services of Supply, but the Quartermaster General on his own initiative ordered the studies prepared by the Historical Section in his office to be published.

Another interesting departure from the general policy of the War Department is the placing of the name of the author of each study on the title page and, in some of the earlier ones, on the cover of the monograph. It is the general policy of the War Department, as is true of many other government agencies, to minimize authorship responsibility. The director of the Quartermaster Corps historical program has indicated it to be his opinion that the deviation in policy, serving as a morale booster, contributed in no small way to the success of this program.

As for other matters of format, the six printed volumes are attractive and easily read. Only numbers five, six, nine, and ten are indexed; numbers two, five, six, seven, nine, and ten are illustrated.

For sources of information the authors depended largely on current administrative records in the Office of the Quartermaster General on deposit in the Mail and Records Branch and, where necessary, on the inactive records from this branch which are in custody of the National Archives. These records include circular letters; office orders; interoffice memoranda; correspondence with field installations; inspection reports; organization charts; manuals and related technical data; directives from, reports to, and corre-

spondence with agencies exercising controls over quartermaster operations; transcripts of conferences and interviews; and numerous other materials. Other sources included records kept by organizational units, "personal files," interviews with military and civilian employees of the Office of the Quartermaster General, and such well known materials as *Army Regulations*, *Mobilization Regulations*, Adjutant General's Letters, and Service of Supply Memoranda and Letters. With few exceptions, no effort seems to have been made to use related information available from other agencies of the government or even from other branches of the War Department. A monograph written by a historian attached to the Chicago Quartermaster Depot is cited in the study on special rations and a number of nongovernment works are cited in the history of the development of industrial mobilization plans.

In connection with the sources of information used, an interesting problem in records administration is raised by the following quotation from the prefatory note of Monograph No. 8:

This monograph is based wholly on current administrative records in the Office of The Quartermaster General. . . . These records, with few exceptions, are classified according to the War Department Correspondence File Manual, and placed in a central depository, the Mail and Records Branch, for service and safekeeping. The various units in the Office of The Quartermaster General, in addition, often maintain "Reading Files" or "Policy Books," which consist of copies of basic documents relating to their respective missions, and which are discarded when no longer needed for current business. These afford the best approach for the reconstruction of the history of any phase of Quartermaster activity. The corresponding documents filed in the Mail and Records Branch are widely dispersed under a multitude of subject headings, and the locating of all documents relating to a specific activity is an extremely laborious, if not an impossible, task. A large part of the material for this monograph was drawn from such "Reading Files" and "Policy Books," . . . and

it has not been possible to ascertain the final place of deposit of every document examined.

This statement or its equivalent appears in almost every one of the quartermaster studies and raises a question that vitally affects future research in this important field. Admitting that disposal of these "Policy Books" under current legal definition of "records" is legitimate and that "These reading files, . . . , are not entirely trustworthy sources, since they sometimes contain carbons of communications which were never actually sent, without this fact being noted on them," is not a valuable source of information being lost not only to the researcher but also to the administrator through their continued disposal?

In addition to using documentary sources and statements of the participants, some of the authors made field trips to get first-hand information relative to work being carried on and development of some of the specialized quartermaster items described.

Although their sources of information were "official" and their studies were subjected to criticism of actors in the drama being recorded—in short, although they were "official historians," the authors were apparently unrestricted in analyzing problems and making criticisms. They were able to maintain admirable objectivity and to attain a reasonable balance between praise and criticism.

In spite of being "official historians" and apparently having access to all available information, the authors faced other difficulties that are inherent in writing history as it is being made. In the first place, they had to choose an arbitrary terminal date for the narrative, which, for obvious reasons, must be the approximate date of the beginning of research on the project. By the time all the stages of research, writing, typing, and submitting a draft for criticism, revising, retyping, editing, and proofreading were complete, their stories were out of date. Even if they went through the entire process again on the

smaller scale necessary to cover the intervening time, their stories were still out of date when finally printed. They could never overcome the time lag.

Other advantages and disadvantages faced by all who do historical research for government agencies in peace as well as in war have been well expressed by Mr. Yoshpe in the prefatory note to his *Production Control in the Quartermaster Corps*:

The scope of the writer's assignments, the ever-mounting volume of records in the Office of The Quartermaster General, the lack of effective controls over record-filing systems, the absence of all-inclusive finding aids, and the uncertainties of war conditions under which the entire program has been prosecuted have made it impossible to attempt exhaustive coverage or undertake detailed treatments of highly technical problems. The emphasis throughout has had to be on the broader aspects of policies and operations. It is hoped that enough of the story has been presented to point the way for more ambitious research undertakings in post-war years and, at the same time, to prove of immediate benefit to the Government agencies in the orientation and guidance of their personnel.

If the writer has worked under enormous handicaps, he has also had many advantages that will be lost to the post-war scholar and Government administrative analyst. He has had the benefit of direct, first-hand contact with the situations he described. This has enabled him to relate policy directives, organizational arrangements, and official and "dead" files to actual operations and thereby establish their true significance. He has been able to fill gaps readily by consulting the officers who were so close to the activities and were largely responsible for the formulation and execution of policies. Personal interviews with these participants in the events have helped to enrich this monograph and eliminate errors of detail and judgment.

As for the future of the Quartermaster Corps historical program, it is anticipated that nine additional monographs will be completed by June 30, 1946, when work under way has been ordered ended and all historical work directed toward a slightly altered pro-

gram for the War Department. Under this new arrangement, the various historical sections will devote their attention to writing a history of the wartime activities of the department in a series in which several volumes will be devoted to the work of each of the several major organizational units.

In summary, it may be said of the eleven monographs now available in the Quartermaster Corps Historical Studies series, that the variety of subjects covered and the number of individual authors have quite naturally made for several approaches, diversified treatment, varying style, and uneven quality. Nonetheless, although these purport to be only preliminary studies, although they are in several instances dealing with problems that were still in process of solution at the time of publication, although little or no effort was made to get information from related agencies or even from other branches of the War Department, and although they were written during the prosecution of the war when conditions for such writing were far from ideal, the series as a whole is quite satisfying.

BOOK REVIEWS

The German Air Force, by Asher Lee. (New York: Harper and Brothers. 1946. Pp. 310. \$3.50.)

Screamers attached to the fins of bombs dropped by German *Stukas* were said to heighten the effect of air attacks against ground personnel. Sounds similar to those produced by the screamers have accompanied most books on air power launched at the American public. As in the case of the German bombs, the effect was best when used on an ignorant and untrained public.

This book lacks the screamers although it might have had them. From its beginnings as a dreaded bully backing up the diplomatic demands of Hitler to its end as a helpless bum in the gutter of ruined Nazi Germany, the German Luftwaffe never lacked an aura on which imaginative writers could base sensational tales. But this author never studied the German air force for details to



ASHER LEE

titillate the public. Instead his primary audience was the professional military men of the Allies anxious to know their enemy in order to win a war.

Wing Commander Asher Lee, Royal Air Force, was the leading British authority on the Luftwaffe. His assistance was rendered not only to the British but also to the United States and Soviet air forces. Now his analysis and conclusions on the subject are made public.

This overall study of the beginnings of that unit, its leaders, organization, membership, equipment, and military operations is a calm appraisal from all possible angles. Up to 1941 the German air force is portrayed as a "first-class fighting air force which for all-round resilience, mobility, and intensiveness has never been surpassed and rarely equaled." But Germany attempted too much and the Luftwaffe could not meet the British-American-Soviet combination. Soon it was "an over-worked athlete running too many races."

The various details which contradict popular impressions might be enumerated at length. For example, Churchill's remark concerning the debt owed to "so few" in the Battle of Britain in 1940 and other gossip have given rise to the common impression that by October of that year the British Fighter Command had almost no machines. It therefore has been a mystery why the German air force abandoned its campaign at the moment when success was in sight. As a matter of fact this source reveals that by the end of September, 1940, the German fighter units had only about 300 serviceable machines, a figure no greater than that of their British opponents.

The book was written before the German records have been studied. Occasionally the author admits his inability to account for certain German moves or clearly indicates that he is hazarding a guess. But the final word on the German air force is a matter of the dim future. The general public interest in the subject will disappear before that time. Now—if ever—the fresh memory of the threat of the Luftwaffe might attract the public to a solid military study, and this is such a book.

Its size prevents the inclusion of many details and there are no maps to accompany the summaries of the various campaigns or charts on the organization. The lack of an index seems inexcusable. The illustrations are poorly reproduced—and if there is one thing remembered by anybody who ever read any of the material on the Luftwaffe published in Germany, it was the excellent photographs.

Nevertheless this remains one of the best single-volume studies of an air force which this reviewer has read in the English language. The subject is treated without bias and from a perspective which is unusual in view of the fact that the war only ended a year ago. If clarity is an attraction to the ordinary reader, it should be noted that the book lacks the military jargon which so many authors seem to consider necessary in order to prove their military associations. In a foreword General Spaatz recommends this study to the attention of the general public. As it is obvious that the average citizen should have a more solid grasp of the complexities of air power—which is something that cannot be gained from the usual books on the subject—it is to be hoped that the people will heed his recommendation.

JOHN R. CUNEO,*
Norwalk, Conn.

Prussian Military Reforms, 1786-1831, by William O. Shanahan. (New York: Columbia University Press. 1945. Pp. 270. \$3.25.)

In spite of the book's broad title the publisher's announcement defines the topic of the book as "an investigation of the value of a large rotating conscript army versus the potentialities in the leading and training of a small group of long-term professional officers and noncommissioned officers, as exemplified by the rebuilding of the Prussian Army after its defeat and disintegration at the hands of Napoleon at Jena in 1806." If the book lived up to the aim expressed in the title, this would amount to the bold claim of revising the prevailing opinion that the collapse of the Prussian monarchy in 1806 was brought about by hopeless stagnation and a complete failure on the part of the Prussian military leaders to understand the revolution in military organization and methods of warfare. The study, however, is much more modest in its scope, and it may be said at the outset that it does not substantially change the familiar picture of the Prussian army at the turn of the nineteenth century. The reader soon discovers that the book neither challenges nor changes the traditional conception that the years between 1807 and 1813 were the period of reforms, of reorganization and modernization of the Prussian army, and that there is very little to report about reforms between 1786, the year of the death of Frederick the Great, and 1806, the year of Prussia's defeat by Napoleon I. However, the discussion of cautious and haphazard attempts at reform in the pre-reform era contributes, by way of contrast, to a better understanding of the systematic and stormy reforms after the defeat of 1806.

Among the military reforms initiated after the Tilsit peace Dr. Shanahan singles out as the central topic of his study the so-called *Kruemper* system. This was the apparently simple, but ingenious and hazardous system by which Scharnhorst succeeded in training—by rotation—more than three times the 42,000 men to which Prussia's pre-1806 army of 200,000 had been reduced by the Paris Convention of September, 1808. Dr. Shanahan believes that modern German military historians, notably Curt Jany and Herbert Rosinski, have in their writings tacitly admitted the failure

*Mr. Cuneo is now engaged in preparing a second volume of his history: *Winged Mars* (Vol. 1: "The German Air Weapon, 1870-1914:" Harrisburg, 1942) having returned to civil life from active service in the Navy.

of the *Kruemper* system, but that it has never been discussed in a detailed manner and its failure openly acknowledged. Dr. Shanahan sets out, according to his introduction, to give "a systematic presentation of the existing, as well as his new, evidence for the failure of the *Kruemper* system between 1807 and 1813."

The point raised is by no means of purely academic interest. It came up in the discussions and decisions of the Paris Peace Conference of 1919, in a disagreement between the Big Four and their military advisers. While, in general, the makers of the Versailles Treaty were very reluctant to cite history and to acknowledge lessons to be learned from history, the clauses of the Versailles Treaty on the German army belong to the exceptions. The provisions made with respect to the size, the recruiting, and the length of service of the post-Versailles German army were based on the conviction of the statesmen that the *Kruemper* system, the method of successive short enlistments in Prussia a century before, had been an unqualified success; therefore, they concluded, its reapplication had to be prevented, otherwise history would repeat itself. The military experts were chiefly apprehensive of the building up of cadres of professional German soldiers, thoroughly trained over a long period, and their judgment has been vindicated by subsequent events—the quick expansion of the army under Hitler through use of the *Führer* army built up by von Seeckt.

Chapters I to V of *Prussian Military Reforms* serve as an extended introduction to the controversial matter on the *Kruemper* system, and they contain an excellent account of the technical aspects of the Prussian military set-up at the turn of the 19th century—infantry, cavalry, artillery, and technical troops; training and drill; discipline and punishment; military administration, supply services, the officer corps, life of the men; and strength of the army in 1806. Unfortunately these chapters are not arranged in either a logical or chronological order—the development of the canton system (Chapter II), efforts at reform before 1806 (Chapter III), Prussian military institutions in 1806 (Chapter I), the battle of Jena and the first reforms (Chapter IV), and "The Work of the Reformers in 1808" (Chapter V). The core of the book is in Chapters VI and VII, a discussion of the relation of the *Kruemper* system to conscription proposals made by the military reformers, and an account of the *Landwehr*. Strangely enough, the author's precise definition of *Kruemper* is given in the conclusion (page

228) and not in the introduction. He calls *Kruemper* a military slang term. German linguists have not given yet a generally-adopted explanation of the term.

In this reviewer's opinion, Dr. Shanahan has not achieved a "historical revision" for the limited period between 1807 and 1813. As far as his conclusions are sound, he only confirms what has never been doubted, namely that the reservists trained under the *Kruemper* system were only a fraction of the Prussian army in the war of liberation, and that without the conscripted *Landwehr* Prussia would have fought with a great numerical disadvantage. But at the same time he unduly minimizes the system by saying that it could hardly be considered a subterfuge for defeating the provisions of the Treaty of Paris, when in fact, despite some similarity to the system of training reservists for the Prussian army in the 18th century, it was clearly conceived and cleverly executed as a subterfuge. The author also castigates the presumed expectations of the sponsors of the system by remarking that it did not succeed "in achieving a phenomenal rise in the strength of the Prussian army" (p. 229); nobody ever expected that it would.

Dr. Shanahan's book is packed with factual information which he has patiently dug out of a large mass of German military literature. One of his most important sources was a new series on the reorganization of the Prussian state under Stein and Hardenberg which the Prussian State Archives began issuing in 1931; the second part, published in 1938, deals with the Prussian army between 1807 and 1814. So it can be said that the book is based on primary source material as far as it was available before the outbreak of the Second World War. The author's failures are not in the field of documentation, but of interpretation.

He appears never to have been really aware either of the greatness of his task or of the existence of a *pleiade* of brilliant German scholars who, in recent decades, have raised accounts of this subject and of the period far above mere fact-seeking and fact-establishing. The French military revolution, and the Prussian military reforms (accompanying a complete reform of the Frederician state) which adopted and expanded the French achievement, were a highly complex matter in which the system of military service, the formation of the army, its equipment, armament and supply, the changes in warfare between 1792 and

1814, the reform of the officer corps and the development of a modern system of command in the Prussian general staff were interlocked; in the conception of the principal reformers, especially Scharnhorst, they were conceived, and therefore have to be regarded, as one and indivisible. This has long been completely understood by the recent German scholars and military historians who have dealt with the Napoleonic period and the Prussian preparation for the war of liberation. To assert, as Dr. Shanahan does, that "for thirty years the interest in the events of the war of liberation has been at a low ebb" (page 235), is to disregard much of the work done during this period. The gaps in the "Bibliographical Essay" (pages 235-240) and in the bibliography (pages 241-253) are astonishing; there is no mention of numerous recent publications with an immediate bearing on the topic, for instance books and articles by Demeter, Hagemann, Hausserr, Linnebach, Mette, Rothfels, and Ulrich.

There are some other deficiencies which should be mentioned. Clausewitz, whose star in military history shines brighter today than ever before, is strangely underestimated. The essential and truly revolutionary impact of Scharnhorst's reform of the Prussian officer corps, namely qualification through education and the selection of officers by ballots of their future comrades according to the regulation of August 3, 1808 (see Eleftherios Sossidi, *Die staatsrechtliche Stellung des Offiziers in absoluten Staat und ihre Abwandlungen im 19. Jahrhundert* ["Rechtswissenschaftliche Studien" No. 80; Berlin: Ebering, 1938]) has not been brought out.

In a special study like this Ferdinand von Schill should not merely have been mentioned as a patriotic soldier dreaming of insurrection, but should have been discussed as a tactician and organizer (see Wolfgang Janke, *Das Königlich Preussische von Schillsche Freikorps und das 2. Brandenburgische Husaren-Regiment von Schill*, 1938).

The strange chapter in the Prussian general staff's (Historical Section) publication of 1854-1855 *Die Reorganisation der Preussischen Armee nach dem Tilsiter Frieden* ("Beiheft zum Militärwochenblatt") giving extracts from suggestions sent by outsiders to the Reorganization Committee, has not been analyzed, and the long *mémoire* of the Prince August of Prussia on reorganization of the army, written in French captivity, has not even been mentioned (*ibid.*, pp. 147-181).

A point so crucial for the author's topic as to

whether or not the demand for universal service resulted from the French Revolution or the working of Prussian legal and military forces, is barely mentioned in a footnote (page 153); the author calls E. von Meier's viewpoint "dogmatic," but he does not supply one of his own. Was it not Scharnhorst's principal merit that in connection with the ideas of the French Revolution he recognized the importance of the national idea for the reorganization of the Prussian Army?

For a long time German productivity in the field of military history will be curbed for obvious reasons, while, on the other hand, an enormous wealth of primary German source material will be at the disposal of American scholars interested in the field. The task of competing with and superseding German standards and German concepts should not be underestimated either by American writers or by reviewers. Therefore, in summing up, it must be said that the author, unfortunately, has reduced the Prussian army reform practically to the question of universal military service and to its institutional aspects. A reader, unfamiliar with the problems of the period and the achievements of German military historical science, receives a distorted view of the proper and distinctly subordinate place of this particular issue in the large framework of Prussian state reorganization and Prussian military reforms of the Napoleonic period.

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Arms and Armament: An Historical Survey of the Weapons of the British Army, by Charles ffoulkes. (London: George G. Harrap and Company, Ltd. 1945. Pp. 142. 15 shillings.)

As a writer on arms and armament, Charles ffoulkes needs no introduction. Catholic of interest, his works cover a broad field. Nearly four decades have witnessed his contributions to the literature upon England's wars and weapons. Few should be qualified to speak with greater authority on these subjects.

But I fear that the fever which put a blight upon so many able writers during World War II must have stricken Mr. ffoulkes when he under-

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took the preparation of this, his latest volume. For it is in my opinion a "quickie"—and plagued with all the faults from which no treatise hastily prepared can possibly be free. At least I prefer to take the charitable view that its defects emanate from a desire to rush the work into print while public interest in arms and weapons still ran high; if from any other cause they could not lightly be dismissed.

We read on the jacket: "No one has suggested how the bronze age sword was fashioned, how thousands of steel helmets were forged without a join from ingots of iron, how the American backwoodsman of the War of Independence rifled their smooth-bore shot-guns, nor how the very complicated fabric of chain mail was produced in very large quantities. These almost unrealized points the author makes in his preface. . . ."

We smack our lips and say: "Here is where we learn secrets of arms making formerly denied us. What a whale of a book this is going to be. Why didn't some one write it sooner?"

But a search of the subject index reveals no reference to any sword of the bronze age. Scrutiny of the text yields (page 16) a paragraph of some 133 words recording primitive man's discovery of copper and tin, ending thus: "And then, by a stroke of what can only be called genius, the craftsman amalgamated both the tin and the copper, thereby producing bronze; a composite metal so hard that it would take an edge as sharp as a modern razor." Thus the story of how the bronze age sword was fashioned. That is all; there isn't any more. And so on for the helmet, the rifle, and chain mail.

As a matter of fact, neither the jacket blurb nor the introduction which it quotes specifically states that the secrets of fabrication enumerated above are to be revealed in the present work. Evidently we were hasty in jumping to conclusions. Or were we perhaps pushed—just a tiny bit?

This rather large ($7\frac{3}{4} \times 10$ inches) thin ($\frac{7}{16}$ inch) volume opens with a short foreword by Field Marshal Jacob, great-nephew of the late lamented General John Jacob, C.B., whose contribution to the progress of military small arms in the form of his marvellously accurate double-barrelled rifle received the usual brush-off from the authorities of the nation in whose interest he perfected it. Then follows an author's preface of $2\frac{1}{2}$ pages, succeeded by a table of contents. Here we learn that the text will comprise chapters on:

- I Armour and Weapons
- II The Sword
- III Lance and Staff-Weapons
- IV Long-Bow, Cross-Bow, Firearms, Grenades, Pistols [Query: Why separate headings for *firearms* and *pistols*?]
- V The Bayonet
- VI The Machine Gun
- VII Artillery
- VIII Signals
- IX The Band
- X Tank and Antitank
- XI Fire, Smoke, Gas

A "Conclusion" occupies $1\frac{1}{2}$ pages, the "Bibliography," $3\frac{1}{2}$, and the "Subject Index," $5\frac{1}{4}$. Of these more later, but the author deserves at least credit for the inclusion of the last two features without which no volume may pretend to scientific standing.

A survey of the chapter titles may evince a lifting of the eyebrows when we reach items VIII ("Signals") and IX ("The Band"), since the propriety of including these in a volume on *weapons* may well be argued. For myself, I should have preferred to find more material on the other subjects—all of which unquestionably merit discussion in a book of this type. "Signals" (communications, to the American reader) are a fascinating topic—but it would seem more appropriate to reserve its exposition for a separate treatise. The same holds for the band.

In Chapter I ("Armour and Weapons"), ffoulkes undertakes to sketch in thirteen pages the history of these subjects from the stone age to the 20th century. He probably does as good a job as might be hoped for within such brief compass. But as is usual with British authors, he has failed to consult some valuable foreign sources. Thus his bibliography makes no reference to the excellent French work on *Arms and Armour* by Paul Lacombe (translated into English and published in London by Charles Boutell, 1870), nor to that monumental encyclopaedia entitled *A Glossary of the Construction, Decoration, and Use of Arms and Armor* by the (American) George Cameron Stone (Portland, Maine, 1934). He has, on the other hand, borrowed from Demmin (German), Hewitt, and Myrick (British), not to mention three references to as many earlier works of his own, so cannot be accused of ignoring more than a portion of the solid source material available to him.

Unfortunately we commence to encounter, as

early as page 24 (Chapter I), incorrect references to the figures which are so freely, and helpfully, scattered through the text. On the page noted, we are referred to Figure 17 for an illustration of a horse bedizened with armour. But this picture is actually captioned "Fig. 15," and appears on page 22, while that identified as Figure 17 is printed on the (unnumbered) page immediately following, and portrays a pikeman in half-armour. Without making any studied attempt to compare each reference in the text which followed, to the figure indicated, I discovered some seven more errors of the same nature. It is therefore reasonable to assume that yet others exist.

In the nineteen pages devoted to the sword (Chapter II), ffolkes presents an excellent and beautifully illustrated exposition of the evolution of that weapon in the British army. Here, as in the all-too-brief chapter on Lance and Staff-Weapons which follows (3½ pages) he is at home, having published in 1938 a volume entitled *Sword, Lance, and Bayonet*. But again we deplore his failure to consult American authors, notably Bashford Dean, for source material on the sword. Dean's *Helmets and Body Armor in Modern Warfare* finds a place in the bibliography, but no mention is made of any of the same author's masterly works on edged weapons.

The chapter on the long-bow, cross-bow, etc. (18 pages), constitutes a digest of the history of the principal small arms (other than edged weapons) used in the British army over the centuries. And while it tells the essence of the story, certain significant omissions exist, some errors are noted, and, in at least one instance, we encounter a queer colloquialism. Thus we find (page 53) an illustration of a wheel-lock "key" (i.e., the tool used for compressing the mainspring), likewise reference to this in the text. And whereas "key" is intelligible to the arms enthusiast, I have yet to hear this particular object referred to by those who know their weapons save as a "spanner." [Augustus] Kottler of Nuremberg is named (page 57) as having been the first to rifle the bore of a small arm (1520). It would have been appropriate to add that a Vienna gunsmith of the same period, Gaspard (Caspar) Zollner (Kollner) is more commonly credited with this feat.

On the page preceding we learn that "Captain" [Elisha] Shaw of Philadelphia is reputed to have invented the percussion cap in 1814. Since this is the first instance in which I have found Shaw bearing a military title, I should have appreciated some information on how he came by it.

Page 59 depicts a cut (copied from Freeman-tle) of the breech of a Sharps carbine the like of which I doubt has ever seen the light of day. And on the page following poor [Christian] Sharps appears with the last letter of his family name elided (i.e., "Sharp").

Minié is given (page 59) credit for his hollow-based bullet (1847) which contributed probably more than any other invention to the perfection of the muzzle-loading rifle. But here ffolkes forsakes his heritage by failure to mention the inventions of Captain Norton of the 34th Regiment (1823) and William Greener, English gunmaker (1836) [1835 according to Greener's son, W. W. Greener¹], each of whom achieved the same results long before Minié and by equally sound devices; indeed Norton's and Minié's were for all practical purposes identical.

Colonel Boxer, Superintendent of the Royal Laboratory, Enfield, is credited (page 62) with the invention of the solid-drawn small arms cartridge case. Later we are informed (page 69) that he patented the coiled-brass case which still bears his name. The latter statement is founded upon excellent authority (see the *Treatise on Military Small Arms and Ammunition*, London, 1888), but the former I seriously question. Were it authentic I believe it would have been recorded in many other sources, notably the various editions of the *British Text Book of Small Arms*. But in none of these do I find Boxer named as the inventor of the solid-drawn case. The volume cited above is silent as to its origin, while McKee, a very dependable writer, in his work, *The Gun Book* (New York, 1918) ascribes it to (the American) Colonel Berdan (1870).

On page 63 we find: "In 1886 the bore [of the British army rifle] of .45 inch was altered to .402 inch. . . ." He neglects to add, however, that this caliber ". . ." was not adopted because at that time attention was generally directed to the possibility of adopting a still smaller caliber." (See the *Treatise on Military Small Arms*, cited above, page 114).

Coming to the pistol we find (page 67): "When not carried in holsters the [early] pistol had a steel tongue on the inside which was clipped into the belt."

Being translated into American (and perhaps English, too) this means that the weapon was equipped with a "belt hook" affixed to the left

¹*The Gun and Its Development* (9th ed., New York, 1910).

side of its stock!

The ten-page chapter on the bayonet (pages 70-79) is both interesting and informative. I confess that the "ring" bayonet is a type with which I was previously unfamiliar. It is unfortunate, however, that Mr. Foulkes has apparently failed to draw for some of his source material on bayonets upon Major Robert Brown, D.S.O., of London and Kent. Major Brown's collection of this type of weapon staggers the imagination, or did when I last saw it in 1937. And his familiarity with the history of each specimen; by what nation used, to what troops issued, and when, is even more startling. Let me suggest to Mr. Foulkes that he might well give thought to devoting his next volume to a history of bayonets alone—and engaging the good Major as co-author.

The following chapter on machine guns (11½ pages) devotes considerable space to Puckle's remarkable revolving chambered weapon of 1718, a device so curious that it has engaged the interest of arms fanciers for well over two hundred years. In this connection he proffers a bit of information which will fascinate the American arms student. This concerns the fact that when Sam Colt sued the Massachusetts Arms Company in 1849 for infringement of his patent on a revolving-chambered firearm, the defendant produced a model of Puckle's gun in evidence that the revolver principle had long antedated Colt's device. But the court held that Puckle's patent specifications were too indefinite, and found for the Colonel!

A description of the Gatling gun on page 86 informs us that it is "cooled by a water-jacket." It is true that the original patent specifications provided for this feature, but practical test showed it to be unnecessary and it was not adopted. Further down the same page we read: "Much has been written of the French Mitrailleuse, which was made by Montigny [sic], an engineer of Fontaine l'Eveque, near Brussels, the original design being by Captain Fafschamps, a Belgian officer. The principle of revolving barrels was the same as that of the Gatling gun."

Apart from the fact that the French mitrailleuse was made not by Montigny (who produced its Belgian prototype), but by a Colonel DeReffye, that the factory was located not at Fontaine l'Eveque but at Meudon, and that its barrels were wholly stationary, the description is correct.

Almost equally confusing is the description of the Nordenfeldt gun, immediately following. Here the barrels are said to "move laterally," while a few lines later we learn that they "were

moved backward and forward by a lever at the rear." Thus these members, according to Foulkes, possessed both lateral and reciprocating motion. To predict the point of impact of projectiles fired from such a weapon would be a task for an Einstein. As a matter of fact, the barrels were stationary; it was the lock mechanisms which moved.

The Gardner gun, as we read on page 88, was invented by "Captain" [William] Gardner, United States Army. Since this gentleman is recorded neither in Cullum nor Heitman, and is never given a military title in official reports of United States trials of his weapon, I am inclined to believe that Foulkes borrows the "Captain" from Johnson and Haven.² Where they managed to unearth it, I am curious to learn.

We read in the same paragraph that: "The peculiarity of the Gardner lay in its carriage which could be raised to enable the gun to fire over a parapet. . . ." Doubtless such a carriage was designed, but the conventional Gardner carriage (see the many American sources which discuss this weapon) did not embody such a device.

With respect to the Hotchkiss revolving cannon (pages 88-89), this is described as of a calibre of "1.45 inches . . . while that of the Gatling gun was .50 inch." As a matter of fact, the Hotchkiss was made in at least four different calibers (37, 40, 47, and 53mm)³ and the Gatling not only in military rifle calibers from 6mm (.236-inch) to .50-inch, but in bores of .65-inch, .75-inch, and 1.00-inch as well. Erroneous also are the figures on the calibers of the first Maxims and the later Maxim machine-gun-cannon, popularly termed the "Pom Pom." Given as ¾-inch and 3-inch respectively, the correct figures are .45-inch and 1½-inch (37mm).

In a chronology of machine gun developments which concluded the chapter devoted to this weapon, we learn that [John] Browning produced a gas-operated machine gun in 1874. This is at variance with the official history of the Browning Arms Company.⁴ According to that document, Browning did not even commence his experiments upon gas-operated guns until after the fall of 1892. Reference to a Hotchkiss gun with a "metal belt-feed" also arouses curiosity. The gas-operated Hotchkiss, derived from the Odokolek

²M. M. Johnson and C. T. Haven, *Automatic Arms* (New York, 1941).

³Lt. E. W. Very, USN, *The Hotchkiss Revolving Cannon* (Paris, 1885).

⁴*A History of Browning Guns from 1831* (Ogden, Utah, 1942).

(which in turn appeared *after* the Browning), was fed from flat metal strips. Perhaps the Hotchkiss revolving cannon, already mentioned, is intended. If so, Foulkes is still wrong, for this weapon was fed not by a belt but from a large metal clip-magazine located above the breech.

In his bibliography of works on machine guns Foulkes includes most of the important sources, but neglects the excellent work by the Americans Hatcher, Wilhelm, and Maloney (1917). He also omits certain significant volumes by Spanish (Génova), Belgian (van der Hagen), French (Cordier), and German authors ("Kaisertreu"). He misnames the journal *Army Ordnance* (Washington) as "Ordnance Journal, USA," and borrows some unimportant material from a series of fifteen articles on machine guns which appeared in this over the years 1941-44, while ignoring some much more significant data in the same texts.

Enough for the debit side of the ledger. For the credit columns, we have here a volume which contains much material newly offered to the American reader. I have already mentioned the description, novel to me, of the "ring" bayonet. Also of interest is reference in the preface to the fact that, as late as the early 19th century, it would still have been possible to observe, among certain oriental nations, the fabrication of chain armor, and to record the technique for posterity. Yet none came forward to do this. Other juicy bits include cuts (page 19) of "war clubs" issued to British Home Guards in 1915 and 1940. These were not weapons of choice, but of necessity. For the British, like most continental nations (with the notable exception of Switzerland, who knows how to take care of herself), rigorously restrict the ownership, and use, of firearms. As a result, when a war emergency develops, the average citizen is weaponless. Fortunately, similar attempts by certain sinister influences to disarm the American citizen have thus far met with success only in a few benighted states. If and when they gain general acceptance, we should be prepared soon to see a new and alien flag floating from the nation's Capitol.

Pikes eighteen feet in length (page 24) excited my interest, as did the picture (page 21) of a British officer of 1825 marching at the head of a column carrying an umbrella. Reference to the "Sword and Bayonet" scandal of 1884 (page 41), when edged weapons issued to British troops for Egyptian service failed miserably in the field, bending and breaking under stress, is later fol-

lowed by the comforting assurance (page 147) that: "Judicious handling by politicians quieted the clamour and the matter ceased to be of public interest."

Fascinating were the sidelights (pages 63-64) upon the life of William Ellis Metford (1825-99) of Lee-Metford rifle fame—especially so the history of his military activities during the Indian Mutiny of 1857. Thus does another unsung hero commence to receive a measure of the fame properly his.

Confusing is the statement (page 70) that a polemic has raged since 1611 on the derivation of the word "bayonet," since the first bayonet (plug type) of which Foulkes offers record (page 72) did not appear until nearly 40 years later (1647). Amusing is the mention (page 77) of public outcry in World War I against the German saw-toothed bayonet, when the British Army had used a similar weapon for sixty years or more!

The chapter on "Signals" (pages 104-110), briefly covering the history of signal communications, contained much that was novel to the reviewer. The map facing page 104, which illustrates the manner in which beacon signals scattered over England in 1596 could relay to London, in the space of 20 minutes, warning of the approach of the Spanish Armada, was truly fascinating. Less intriguing to my unmusical soul was the chapter on "The Band" (pages 111-121).

The "Tank and Antitank" chapter (pages 122-138) contains a prescient quotation from Da Vinci on the battle car of his design, precursor of the modern tank, to wit: "This is good to break up the ranks of the enemy but it must be followed up." Another arresting item in this chapter (pages 129-30) refers to an apparently workable tank designed by an Australian corporal in 1912, and said to have been submitted to the War Office. Doubtless the plans are still in the same cabinet and drawer in which filed on their day of arrival.

In the last analysis, this volume would probably fail to attract the student concerned only with American weapons. But it warrants the attention of any whose interests extend to the military paraphernalia of the mother country.

CALVIN GODDARD,*
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*Lieutenant Colonel Goddard's qualifications as an ordnance expert have been recognized in many ways, for example, by his having been called to serve as a member of the board of editors of the *Encyclopedia Britannica*.

General Wainwright's Story, by General Jonathan M. Wainwright, edited by Robert Considine. (New York: Doubleday & Co., 1946. Pp. 314. \$3.00.)

The successes achieved by our military forces in the Pacific during the last three and a half years of war have obscured the bitter and humiliating defeats suffered by American troops in the first part of 1942. *General Wainwright's Story* is the story of our defeat on Bataan and Corregidor, told in a simple, straightforward, and moving manner. On General MacArthur's departure for Australia in March, 1942, General Wainwright assumed command of all United States forces in the Philippines. Faced by an overwhelmingly superior enemy, with inadequate supplies and little prospect of securing more, he knew the situation was hopeless. He could only fight a delaying action until forced to surrender. By 6 May it was evident that further resistance meant only the useless expenditure of lives, and Wainwright, with a heavy heart and only after long deliberation and much soul-searching, surrendered to the Japanese commander, General Yamashita. Often throughout his story Wainwright refers to this decision, the most difficult of his life, to justify it as the only course open to him.

Japanese treatment of their prisoners of war is now a familiar story to the American public. General Wainwright was not treated as badly, nor did he suffer as much as did most of those taken by the Japanese. He admits this frankly, and one can judge the cruel hardships and torture which was the fate of the common prisoner by the treatment accorded to our highest-ranking officer in Japanese hands. That the General should be able to tell the story of his imprisonment so gently, with restraint and without bitterness, is a constant source of wonder and a tribute to his courage, character, and spiritual strength.

After almost three years of imprisonment, Wainwright was released from a Manchurian camp when the Japanese surrendered. He was flown first to Chungking, thence to Manila and Okinawa, and finally to Tokyo. There he was reunited with MacArthur and witnessed the surrender ceremony aboard the *Missouri*. From Tokyo he flew back to Manila to be present at the surrender of Yamashita—the triumph of poetic justice—for whom he urged fair treatment. Modestly the General recounts the ovation everywhere accorded him on his return to America and his

final triumph, award of the Congressional Medal of Honor.

The lesson which General Wainwright draws from his story is that all his—and the country's—misfortunes were due to unpreparedness. To prevent a recurrence of a similar tragedy in the future he urges the American people not to make the same mistake again.

As a brief and popular account, General Wainwright's description of the defenses of Bataan and Corregidor is the best that has yet appeared. For the serious student of military history, however, it will have only a limited interest and value. The more casual reader may be annoyed by the frequent adulatory references to General MacArthur. But this is a story which will find a ready and sympathetic audience. It is worth reading and its lessons are worth remembering.

LOUIS MORTON,*
Washington, D. C.

Patton and His Third Army, by Colonel Brenton G. Wallace. (Harrisburg: Military Service Publishing Company. 1946. Pp. 232. \$3.00.)

The author of this absorbing and timely volume sets forth his objective as follows: "In these pages, I am trying to do two things—first, to give any possible military readers a broad picture of the Third Army situation as it looked at Headquarters from day to day; and second, to give the non-military reader some idea of what went on in the Third Army area in those wild summer days of 1944."

In developing his theme, the author speaks with the authority of an eyewitness and participant. As Assistant Chief of Staff (G3) (Liaison), Third Army, he had unusual opportunities to circulate among members of the staff at Third Army Headquarters and at the headquarters of subordinate units. He records events pertaining to the Third Army from March, 1944, when its Headquarters Forward Echelon arrived in England, to V-E Day. Those chapters devoted to the Avranches breakthrough, the capture of Paris, the capture of Metz and the Saar Valley, Battle of the Bulge and the subsequent advance of the Third Army across the Rhine and on into Austria, present a series of victories inspired by the indomitable will and fear-

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less leadership of General Patton. The final chapter on "Patton—the Man," draws an authentic portrait of the Third Army's distinguished commander.

The interpolation of photographic illustrations and appropriate sketch maps adds interest to the narrative. Documentation is limited to some seventeen pages in Appendices I to VII; but the book fulfills the purposes for which it was written. The author is sincere and straightforward; he is to be congratulated on his tactful presentation of the operations in which higher headquarters held the Third Army in leash at the Falaise Gap and again at the Siegfried Line. I recommend this book to all military and nonmilitary readers who want to know more about General Patton and the splendid achievements of his hard-hitting Third Army.

C. C. BENSON,*
Washington, D. C.

Uncommon Valor: Marine Divisions in Action, by six Marine Corps combat correspondents. (Washington: Infantry Journal Press. 1946. Pp. 256. \$3.00.)

Uncommon Valor gives in brief compass the story of the six Marine divisions in the war against Japan; each combat correspondent, who was for one or more operations with the division he describes, lists the high points of each operation in which his division engaged, and tells of the trials and heroism of the men who did the fighting. The book has an expository introduction, which explains the organization of a Marine division and the echelons of Marine command in the Pacific. There is also in an appendix a list of simplified maps of the islands and regions over which the marines fought, lists of divisional casualties and battle stars.

The book has a modest aim; it is obviously designed for the general reader or perhaps as a publicity memorial for marines who were in the six divisions. It is in no sense military history. There is almost nothing of strategy or tactics here; it is the story of men who distinguished themselves by heroic deeds, the story of living on tropical islands during the long period of training, an attempt to catch and hold in print memories of men, places, and events now already being forgotten. The va-

rious accounts differ widely in merit; perhaps the best is that of David Dempsey, who writes simply and directly of the 4th Marine Division, and by his restraint and accuracy impresses the reader. Other authors, such as C. Peter Zurlinden, who writes of the 2nd Marine Division, or Herman Kogan, who tells the story of the 6th Marine Division, have strange foreshortenings and inaccuracies in their accounts. Zurlinden, for example, omits entirely any mention of the attack of the 8th Marines, with the 1st Battalion, 29th Marines, attached, on Mt. Tapotchau's summit, an attack bitterly and brilliantly fought that decided definitely the outcome of the operation on Saipan; Kogan tells something of the struggle for Sugar Loaf Hill on Okinawa, but omits the equally fierce fight for Half Moon Hill by the 1st and 3rd Battalions of the 9th Marines. He lists as accomplishments of the 6th Marine Division the capture of Naha, Naha Airfield, and Yontan Airfield—all undefended—and omits mention of Mt. Yaetake, which was the key to Motobu, or Sugar Loaf and Half Moon, which were the strong-points guarding the Shuri line from a flanking movement. Of the six authors, George McMillan succeeds the best in trying to portray that intangible thing, the personality of a division.

PHILLIPS D. CARLETON,*
Washington, D. C.

Eclipse, by Alan Moorehead. (New York: Coward-McCann, Incorporated. 1945. Pp. 309. \$2.75.)

Alan Moorehead, an Australian, was one of the outstanding correspondents serving with Allied armies in the recent war. *African Trilogy*, one of the best correspondent's books of the war, introduced him favorably to readers of current military literature. For the title of the present volume the author chose the code name *Eclipse* which was given to the plan for the final occupation of Germany. However, the narrative begins with the crossing of Messina Straits and the landing of Montgomery's Eighth Army at Reggio. He follows the Italian campaigns to the fall of Rome when the narrative turns to the preparation and execution of the Normandy invasion. Three quarters of the volume are devoted to the operations that developed from the lodgement on the Cotentin Peninsula to the collapse and surrender of Ger-

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*Major Carleton, USMCR, has served in various capacities with the Marine Corps historical program and has now returned to civil life.



ALAN MOOREHEAD

many. Throughout these operations Moorehead was attached to Montgomery's Twenty-first Army Group headquarters. His book is no puff for Montgomery, although Moorehead has given us a good picture and a keen appraisal of the British commander.

There is no attempt by the author to mastermind Allied strategy and nothing of the "now it can be told" atmosphere which pervades Ingersoll's *Top Secret*. Moorehead is generous to higher headquarters and allied armies and commanders. The book breathes the spirit of united effort and close cooperation in the military operation that freed western Europe.

When we ask, what does this book afford the serious student of military affairs? it is not easy to answer. There are no revelations or deep analysis of the military events which give the book its structure. Moreover, in presenting German intentions and in handling German names and units he is often in error. And yet this is an excellent

work, one of the best of the war books. It is not a history or a critique of the campaigns, nor is it a book filled with the author's personal thoughts and adventures. It is, as the author suggests, a "commentary" and this perhaps best describes it. Its value lies in the quality of the author's mind, his powers of observation, and his exceptional ability in communicating his thoughts and observations to his readers. Such judgments as he renders are modestly presented. As a record of impressions and reactions this volume is unexcelled in the library of war correspondents' books.

ORON J. HALE,*
Washington, D. C.

American Engraved Powder Horns: A Study Based on the J. H. Grenville Gilbert Collection, by Stephen V. Grancsay. (New York: The Metropolitan Museum of Art. 1946. Pp. 96. \$10.00.)

To the American frontiersman, two objects represented the margin between life and death in his struggle against his enemies and his ceaseless search for food. Foremost, of course, was his rifle or musket; second only to it was his powder horn. Both were objects of great care and veneration, commonly given the position of honor over the kitchen fireplace. From the earliest days of our frontier until the middle 19th century (when loose powder was replaced by the metallic cartridge) the powder horn was the usual accompanist of the gun; only the organized military corps made use of the paper cartridge.

Objects of such veneration, naturally, were decorated by such means as the frontiersman could devise. Rifles of the period are things of great beauty. But the materials of the gun did not lend themselves to graphic expression as readily as the smooth, polished surface of the horn. It was on this, as Mr. Grancsay writes, that "the soldier demonstrated his skill with the jackknife, just as the sailor on the lee days carved out scrimshaw work." The practice was common, and the carved powder horns which have come down to us are among the more interesting forms of American folk art and, at the same time, a store of biographic, and historic interest.

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Mr. Stephen V. Grancsay, Curator of Arms and Armor of the Metropolitan Museum of Art, has offered a detailed coverage of the subject in his *American Engraved Powder Horns*. The only suitable adjective is "exhaustive." The study deals primarily with the collection of American horns and primers formed by J. H. Grenville Gilbert of Ware, Massachusetts, and presented to the Metropolitan, but it goes considerably further in cataloging all known American engraved horns. His check list of 1,152 items is arranged and indexed so that the subject matter carved, the original and present owners, professional engravers, and dates are readily located. The horns of the Gilbert collection are illustrated, both by colotype reproduction and by line drawings of the engraved areas. There is a comprehensive bibliography of the subject. In the reviewer's opinion, the book forms an indispensable addition to an arms collector's library.

The volume is published by the Metropolitan Museum of Art and is entirely in keeping with the splendid line of publications presented by that institution. The typography, format, and illustrative material are of the highest order and suggest the huge advance made by private museums in this activity.

FREDERICK P. TODD,*
Washington, D. C.

Brassey's Naval Annual, 1945, edited by Rear Admiral H. G. Thursfield. (New York: The Macmillan Company. 1945. Pp. 324 plus 119. \$6.00.)

The jacket of the 1945 Brassey remarks that this is the fifty-sixth year of publication and encountering the volume again is like meeting a respectable old lady who has been a friend of one's youth. It is a pleasure to find that the war has caused no gap in the long line of blue volumes, even though this one arrives some six months late. It is a pleasure to be able to report that the "Naval Chronicle" by Captain Altham has been carried forward to the close of 1944 and that it

forms a simply invaluable source of reference whose accuracy and completeness is astonishing considering the difficulty of obtaining information under war conditions.

There is the usual section by Mr. McMurtrie on foreign navies and it is of the usual excellence; Mr. Brodie, whose book received so much attention in the previous Brassey, here speaks for himself on Pacific strategy, and with the good sense and clarity that has so long been associated with his name. Dr. Rosinski contributes a paper on the interlocking influences of strategy and propaganda in German naval thinking and a very good paper it is, while the development of the British carrier service is traced by "Volage."

That is, in its literary section Brassey maintains the standard it has so long set. Unfortunately, when one reaches the reference section one is obliged to report that the old lady seems slightly drunk. The dimensions and particulars tables of the world's warships have been set in a new type and a good many of the plans have been redrawn with considerable improvement, but the data tables have an incompleteness and inaccuracy which is simply astonishing in a publication that has some right to claim authority.

The compilers of these tables do not even seem to be aware of the information farther forward in the book—in Mr. McMurtrie's article, for instance. He says very clearly that the battle cruisers *Alaska* and *Guam* have been completed, that they have nine 12-inch guns and a length of about 800 feet. In the data tables they are listed as building, with no data. He describes the several classes of American and British escort carriers and says that there are nearly 100 of them. The data tables claim only nineteen, all of one class, and armed with 5-inch guns. The data tables are unaware of the names of the two last Japanese battleships or their characteristics although they are described in at least two other places in the volume.

In short, if the text section of the book is as valuable as ever, and perhaps even more so, the tabular section needs a thorough revision and there is very little excuse for its not having been made in a volume which reaches its readers eight months after the end of the war has removed such information from the officially secret list.

FLETCHER PRATT,
New York, N. Y.

*Mr. Todd, trustee of the American Military Institute, is now engaged as a civilian in developing the War Department's program for an American military museum. Previously, as a lieutenant colonel, he served in the Pacific with the Army's historical program.

Old Rough and Ready: The Life and Times of Zachary Taylor, by Silas Bent McKinley and Silas Bent. (New York: The Vanguard Press. 1946. Pp. 288. \$3.50.)

An adequate life of General Zachary Taylor, military leader and twelfth president of the United States, has yet to be written. When Taylor began his series of spectacular victories over the Mexicans in 1846, a series of biographies started to appear, popular in tone and short on substance. New ones kept coming from the presses until a year or so after his sudden death in the White House in 1850. A more serious attempt, by Major General O. O. Howard, appeared in 1892. A quite worthwhile account of Taylor as a military figure issued from the pen of Holman Hamilton, a newspaperman, in 1941. Entitled *Zachary Taylor, Soldier of the Republic*, the latter is the best work on the man thus far.

Old Rough and Ready purports to give the whole picture: soldier, statesman, and "period" too. The text is far too brief for this, yet is shot through with irrelevancies also. It does not add to our knowledge of Taylor to learn that Benjamin Rush was a friend of Benjamin Franklin and to read speculation as to whether Monroe or John Quincy Adams was the true author of the Monroe Doctrine (and don't the writers know the answer?). The book, which has no annotation and seems to have been written chiefly from secondary accounts, is not always too sound in its history, either. Clipper ships are put in the 1815-1820 era, Van Buren is classed as a "Tammany Democrat," and Arthur M. Schlesinger (*pere*) is termed the "foremost authority" on the movement across the Alleghenies. The statement is made (page 119) that Polk "appears to have been the least distinguished presidential material so far offered in this country." The authors accept Taylor's side of the quarrel with Polk quite uncritically, but, even so, they might have had somewhat more appreciation of Polk's calibre as a political leader and president. While they estimate Taylor accurately enough in general, even a careful reader is not always aware of this. For example, the rash statement of a Louisiana historian to the effect that Taylor was the chief influence in our acquiring the Pacific coast area is quoted (page 3) with apparent approval. Yet the chief fault of the book, in the eyes of the general reader for whom it is presumably intended, is that it is poorly written. The narrative is confused, it does not focus sufficiently upon Taylor, and its portions

dealing with the contemporary background are scarcely integrated at all with those on the man. Old Zach was not a great man, but he was at least a likeable and interesting figure and this should have been made plain.

For the military episodes, Hamilton's study will continue to be the best thing available, supplemented by Justin Smith's history of the war with Mexico. Some day we may have a suitable account of the old general's year and a half as president. Taylor didn't do so badly. He blundered and blustered in foreign affairs and thought that he could be "as independent of Congress as a wood-sawyer," but on the overpowering issue of the day, the question of the extension of slavery into the territories, Taylor's policy was sound. He attempted to organize the new areas into states at once, so as to avoid sectional debate on the question. That this would also prevent the spread of slavery was only incidental. Taylor was a slave-owner himself. Had he lived longer, however, his shortcomings as a statesman would unquestionably have been more apparent.

IVOR D. SPENCER,*
Kalamazoo, Mich.

The Beleaguered City, by Alfred Hoyt Bill. (New York: Alfred A. Knopf. 1946. Pp. 313. \$3.00.)

With all that has been written on the brilliant and tragic four years of the life of the Confederate States of America, this book on the city of Richmond during those years is another evidence of the never failing interest on the part of both writers and readers in the history of the Confederacy. Alfred Hoyt Bill gives a colorful and well written account of that most engaging capital, which remained throughout the war the heart of the Confederacy and the defense of which was looked upon as vital to the success of the South; Richmond was not only the seat of the government, it was for most of the period very close to being a part of the battle front. As its citizens were well aware, it was the prize coveted by the North which Lee's Army of Northern Virginia strove ceaselessly to protect and did protect until the resources of the South had been drained and its cause had become hopeless.

The Beleaguered City does not present new material, rather it weaves together in skillful fashion

*Lieutenant Ivor Spencer is the author of "Overseas War—In 1946!" which appeared in *MILITARY AFFAIRS*, IX (Winter 1945), 306-313.

its account, which is based largely upon memoirs, diaries, newspapers, and biographies. It makes good use of Dr. Freeman's works. It does much more than so many local histories which contribute little but chronicles of events as reported in the newspapers or the social gossip as presented in the letters and diaries of the women of fashion; it presents a convincing picture of the city and its people, of their thoughts and feelings as well as their appearance, and it paints well the background of military events against which the city was posed. It is a picture of light and shadow from the first days of the war, marked by enthusiasm and bravado when the city looked forward eagerly to the conflict which all but the few expected would be won in a few months, when the streets were filled with colorful uniforms and the hotels were loud with boastful talk, through the months of increasing danger and deprivation when anxiety alternated with hope, until the final months of exhaustion and defeat. It views the history of those years through the eyes of the people who stayed at home, it points up their ignorance of the military situation, their overconfidence, their sentimentality, and bravery. It makes clear what was not clear to them that the war could not be won by brilliant generals, brave men, and noble sentiments. That commonplace word "supply" troubled few of the citizens of Richmond in the early days of the war; they foresaw none of the inevitable consequences of maintaining an army with insufficient food, forage, shoes, and guns. They learned this lesson painfully as the colorful uniforms were replaced by ragged gray, as the wounded and the homeless brought disease and congestion to the city, as the

inefficiencies and jealousies in the government became more evident, as the early victories gave way before the superior manpower and resources of the North.

Closer at hand than the military situation and better understood by the man in the street was the political situation. The Davis administration like the Lincoln administration in Washington suffered from continual criticism, both just and unjust. Within its ranks were the usual petty jealousies of little men, incompetency, and endless red tape that did not escape bitter comment by the newspapers. The book contains good sketches of Davis, the members of his cabinet, Lee, the popular idol—Stuart, Jackson, the notorious Winder, and others. It describes the dislocation of the economic life of the city, the shortages, the black markets, the profiteers, and the resulting inflation that were evidence of the breakdown of the southern economy and that suggest present day parallels. Finally, one cannot escape the observation that while the weapons of warfare have become more fearful in the years since 1865 the tragic consequences of war upon civilian populations were hardly less then than now.

The footnotes at the end of the volume should not be overlooked as they contain additional material of considerable interest which would not fit easily into the text. It is to be regretted that citations to sources are not given specifically but can be guessed only by reference to the bibliography.

ELIZABETH B. DREWRY,*
Washington, D C.

*Miss Drewry has aided many searchers using records in the National Archives relating to various phases of World War II.

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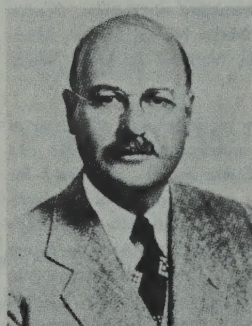
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JAMES PHINNEY BAXTER, 3RD

To James Phinney Baxter, 3rd, principal author of *Scientists Against Time*,* and to his collaborators in the Office of Scientific Research and Development for an unprecedented and thoroughly interesting history of American scientific participation in World War II. During the war, war research was clothed in mystery. A few of its products became generally known, but most of them were still obscured until at the end of the conflict the curtain of secrecy was drawn aside. Public attention was then attracted to atomic fission, proximity fuses, rockets, new explosives, and advanced applications of radar.

Scientists Against Time describes the labor which lay behind these and other products of war research. It compares what was being done in this country with what at the same time was being done among enemy scientists. It makes luminously clear how much more effectively our scientific intellectual resources were used than were those of Axis countries. And it shows the close interrelationship of scientific countermeasures and of strategy on both sides, the see-saw of submarine warfare, the race for defense against the V-1 rockets while the Germans prepared to launch them, and the tremendous sense of pressure under which the scientists were operating.

President Baxter emphasizes how significant the organization of our scientific war research was in obtaining such superior results, and he illustrates various ways in which the gap between scientists and military men was imperfectly bridged. His appreciation of good organization is shown in the book itself. He has been extraordinarily successful in combining the topical treatment with the general chronological approach and in relating the work of the scientists to the course of the war as a whole. It is interesting to find evidence that in war research as elsewhere, we worked with Allies and not alone.

*Boston: Little, Brown and Company. Pp. xviii, 473. \$5.00.